ORDER NO. AD9306166C8

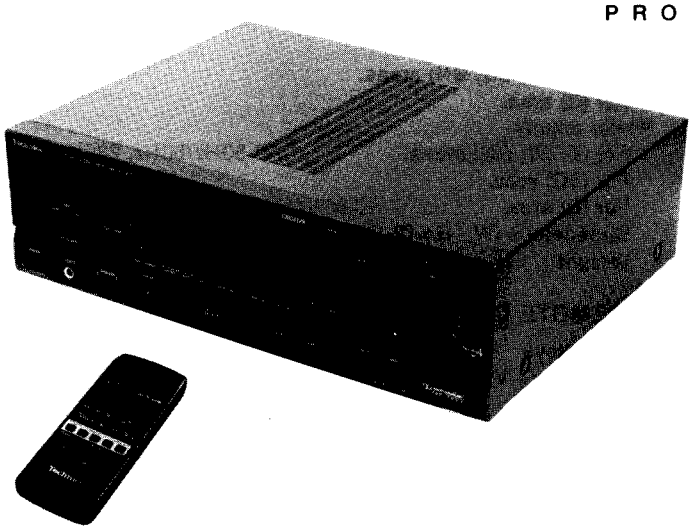
Service Manual

AV Control Stereo Receiver

Receiver

SA-GX350

DOLBY SURROUND PRO • LOGIC *



Colour

(K) ... Black Type

Area

Suffix for Model No.	Area	Colour
(E)	Europe.	(K)
(EB)	Great Britain.	
(EG)	Germany.	
(G)	Asia, Latin America, Middle Near East and Africa.	
(GN)	Oceania.	

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SPECIFICATIONS (DIN 45 500)

■ AMPLIFIER SECTION

Power output (at 240V)	
DIN 1kHz (T.H.D. 1%)	2×80W (4Ω)
20Hz–20kHz continuous power output both channels driven	2×50W (8Ω)
Total harmonic distortion	
rated power at 20Hz–20kHz	0.05% (8Ω)
half power at 1kHz	0.03% (8Ω)
Power output at the Dolby Pro Logic operation	
DIN 1kHz (T.H.D. 1%)	
Front	2×40W (4Ω)
Center	40W (4Ω)
Rear	20W (4Ω)
Intermodulation distortion	
rated power at 60Hz: 7kHz=4: 1, SMPTE	0.5% (8Ω)
Power bandwidth	
both channels driven, −3dB	10Hz–40kHz (8Ω)
Damping factor	40 (8Ω)
Input sensitivity and impedance	
PHONO	3mV/47kΩ
CD, VCR 1, VCR 2, TAPE/DCC	200mV/22kΩ
S/N at rated power (8Ω)	
PHONO	70dB (IHF, A: 80dB)
CD, VCR 1, VCR 2, TAPE/DCC	75dB (IHF, A: 88dB)
Frequency response	
PHONO	RIAA standard curve (30Hz–15kHz) ±0.8dB
CD, VCR 1, VCR 2, TAPE/DCC	10Hz–40kHz, ±3dB
Tone controls	
BASS	50Hz, +10 to −10dB
TREBLE	20kHz, +10 to −10dB
Output voltage	
VCR 1 OUT, TAPE/DCC REC (OUT)	200mV
Channel balance (250Hz–6.3kHz)	±1dB
Channel separation	55dB
Headphones output level and impedance	430mV/330Ω
Load impedance	
A or B	4–16Ω
A and B	8–16Ω

■ FM TUNER SECTION

Frequency range	87.50–108.00MHz
Sensitivity	
S/N 30dB	1.5μV/75Ω
S/N 26dB	1.3μV/75Ω
S/N 20dB	1.2μV/75Ω
IHF usable sensitivity	(IHF '58) 1.5μV/75Ω
IHF 46dB stereo quieting sensitivity	22μV/75Ω
Total harmonic distortion	
MONO	0.2%
STEREO	0.3%
S/N	
MONO	60dB (75dB, IHF)
STEREO	58dB (71dB, IHF)
Frequency response	20Hz–15kHz, +1dB, −2dB
Alternate channel selectivity ±400kHz	65dB
Capture ratio	1.0dB
Image rejection at 98MHz	40dB
IF rejection at 98MHz	70dB
Spurious response rejection at 98MHz	70dB
AM suppression	50dB
Stereo separation	
1kHz	40dB

Technics

Carrier leak	
19kHz	−30dB (−35dB, IHF)
38kHz	−50dB (−55dB, IHF)
Channel balance (250Hz−6.3kHz)	±1.5dB
Limiting point	1.2μV
Bandwidth	
IF amplifier	180kHz
FM demodulator	1000kHz
Antenna terminal(s)	75Ω (unbalanced)

■ AM TUNER SECTION

• For (E, EB, G, GN) areas.	
Frequency range	
MW [For (E, EB) areas.]	522−1611kHz (9kHz steps)
	530−1620kHz (10kHz steps)
[For (G, GN) areas.]	531−1602kHz (9kHz steps)
	530−1600kHz (10kHz steps)
LW [For (E, EB) areas.]	144−288kHz
[For (G, GN) areas.]	153−279kHz
Sensitivity (S/N 20dB)	
MW	20μV, 330μV/m
LW	45μV
Selectivity	
MW (at 999kHz)	55dB
LW (at 252kHz)	55dB
Image rejection	
MW (at 999kHz)	40dB
LW (at 252kHz)	40dB
IF rejection	
MW (at 999kHz)	55dB
LW (at 252kHz)	55dB
• For (EG) area.	
Frequency range	522kHz~1611kHz (9-kHz steps)
	530kHz~1620kHz (10-kHz steps)
Selectivity (S/N 20dB)	20μV, 330μV/m
Selectivity at 999kHz	55dB
Image rejection at 999kHz	40dB
If rejection at 999kHz	55dB

■ VIDEO SECTION

Output voltage at 1V input (unbalanced)	1±0.1Vp-p
Maximum input voltage	1.5Vp-p

■ GENERAL

Power consumption	
For (E, EB, EG, GN) areas.	220W
For (G) area.	270W
Power supply	
For (E, EB, GN) areas.	AC 50Hz/60Hz, 230V−240V
For (EG) area.	AC 50/60Hz, 230V
For (G) area.	AC 50Hz/60Hz, 110−127V/220−240V
Dimensions (W×H×D)	430×136×352mm
Weight	8.8kg

■ REMOTE CONTROL TRANSMITTER

Control keys	40 keys
Dimensions (W×H×D)	70×27×175mm
	(2-3/4″×1-1/16″×6-57/64″)
Weight	125g (4.4oz)
Power source	two "AAA", (UM-4/R03)

Notes:

1. Design and specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

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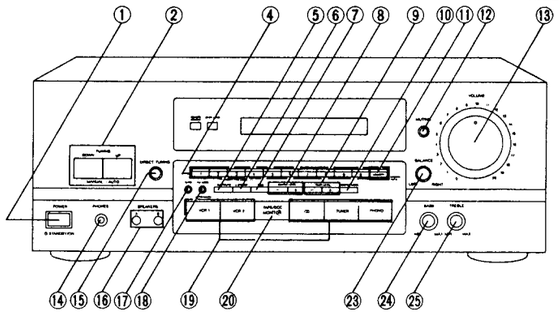
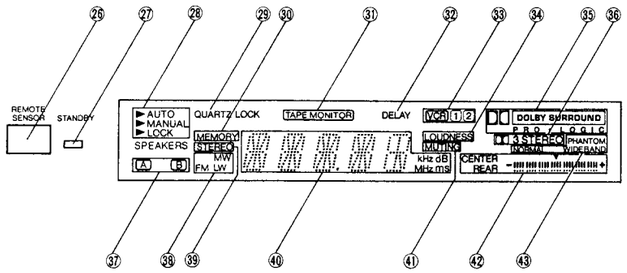
■ FRONT PANEL CONTROLS

Control section



No.	*Name*
①	**Power " ⏻ STANDBY/ON" switch (POWER, ⏻ STANDBY/ON)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
②	**Tuning buttons (TUNING)**
④	**Numeric buttons (1 – 0)**
⑤	**DOLBY PRO LOGIC SURROUND ON/OFF button (SURROUND)**
⑥	**DOLBY PRO LOGIC 3 STEREO ON/OFF button (3 STEREO)**
⑦	**Test signal ON/OFF button (TEST)**
⑧	**Center level adjust button (CENTER LEVEL)**
⑨	**Rear level adjust button (REAR LEVEL)**
⑩	**Center mode select button (CENTER MODE)**
⑪	**Memory button (MEMORY)**
⑫	**Muting button (MUTING)**
⑬	**Volume control (VOLUME)**
⑭	**Headphone jack (PHONES)**
⑮	**Direct tuning button (DIRECT TUNING)**
⑯	**Speaker select buttons (SPEAKERS)**
⑰	**Band select button (BAND)**
⑱	**FM mode select button (FM MODE)**
⑲	**Input select buttons**
⑳	**Tape/DCC monitor button (TAPE/DCC [MONITOR])**
㉓	**Balance control (BALANCE)**
㉔	**Bass control (BASS)**
㉕	**Treble control (TREBLE)**

Display section



No.	*Name*
㉖	**Remote control signal receptor**
㉗	**"STANDBY" indicator** When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
㉙	**Quartz lock indicator**
㉚	**Memory indicator**
㉛	**Tape monitor indicator**
㉝	**VCR select indicator**
㉟	**DOLBY PRO LOGIC SURROUND indicator**
㊱	**DOLBY PRO LOGIC 3 STEREO indicator**
㊲	**Speaker select indicators**
㊳	**Band indicators**
㊴	**FM stereo indicator**
㊵	**Input selector/frequency display**
㊶	**Muting indicator**
㊷	**Center/rear level display**
㊸	**Center mode indicators**

■ CAUTION FOR AC MAINS LEAD

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ⓚ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

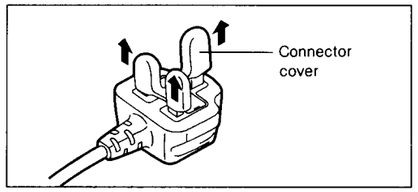
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚ .

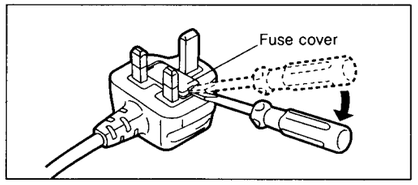
Before use

Remove the connector cover as follows.

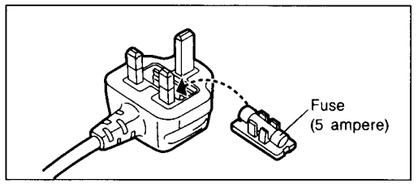


How to replace the fuse

1. Remove the fuse cover with a screwdriver.



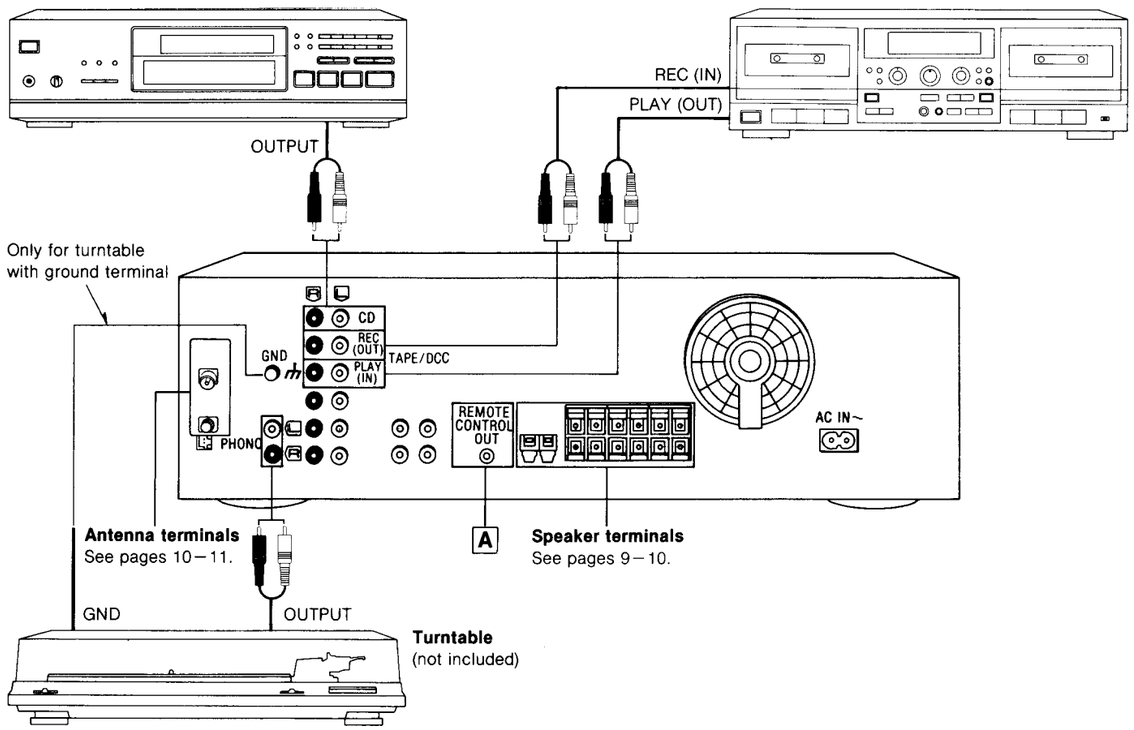
2. Replace the fuse and attach the fuse cover



■ EQUIPMENT CONNECTIONS

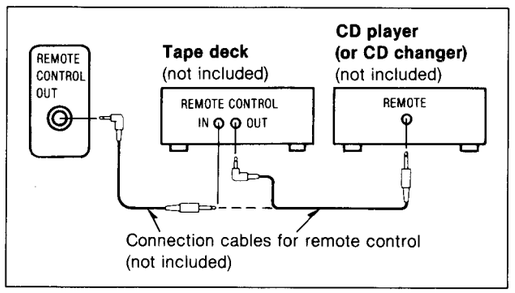
Connecting audio equipment

Stereo connection cable (not included)
White (L)
Red (R)



A "REMOTE CONTROL OUT" terminal

Connect the connection cable for the remote control to a Technics tape deck and/or CD player (or CD changer) which has the appropriate remote control terminal as shown below. If a tape deck is not being used, the CD player (or CD changer) can be connected directly (dotted line).



For a CD player (or CD changer) with a remote control sensor the above connection is not necessary.

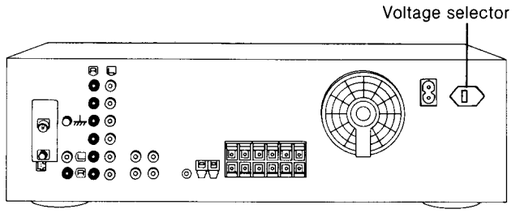
To set the power voltage

(For (G) area only.)

Set the voltage selector to the voltage setting for the area in which the unit will be used.

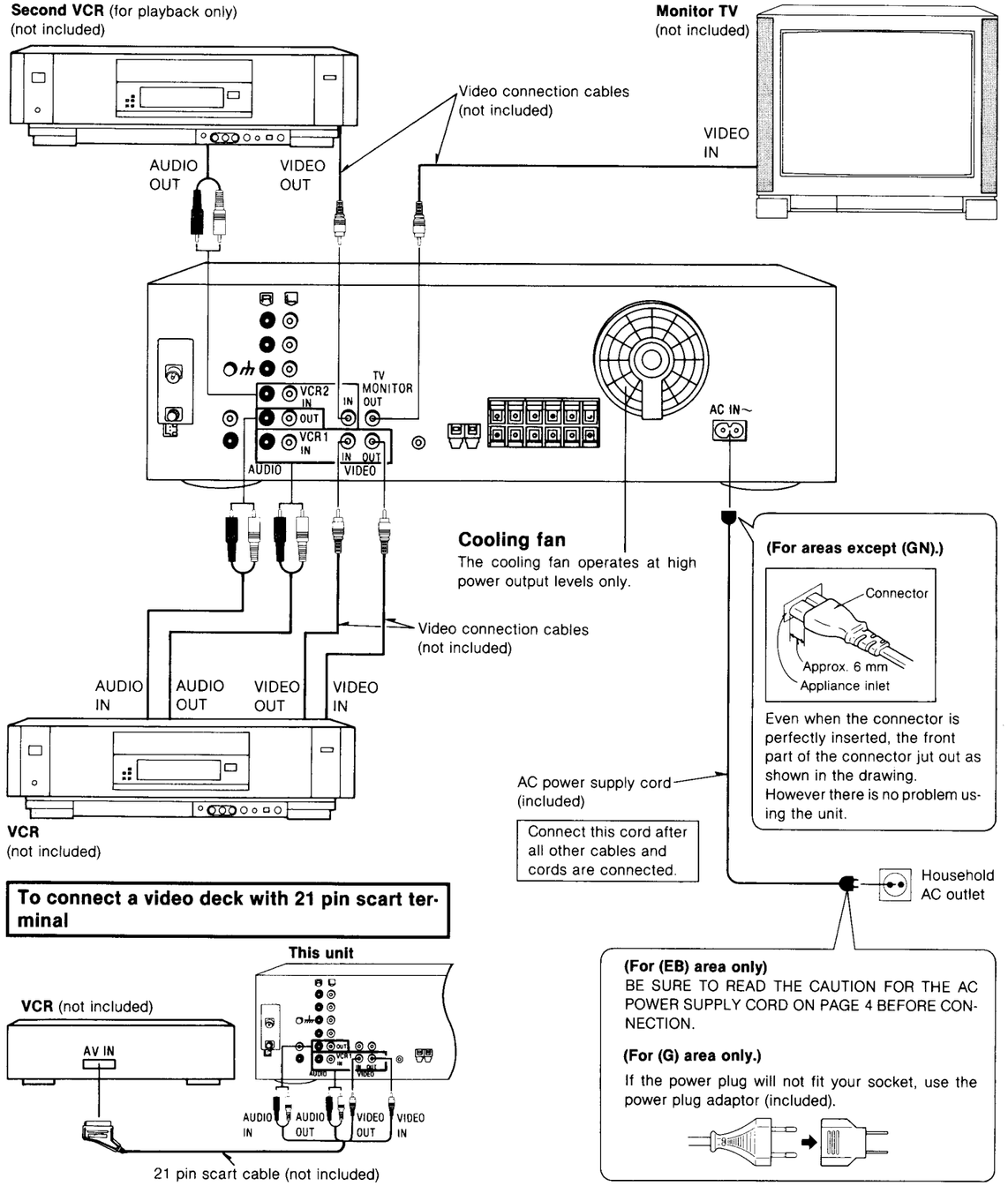
Note

Note that this unit will be seriously damaged if this setting is not made correctly.



Connecting video equipment

Stereo connection cable (not included)
White (L)
Red (R)



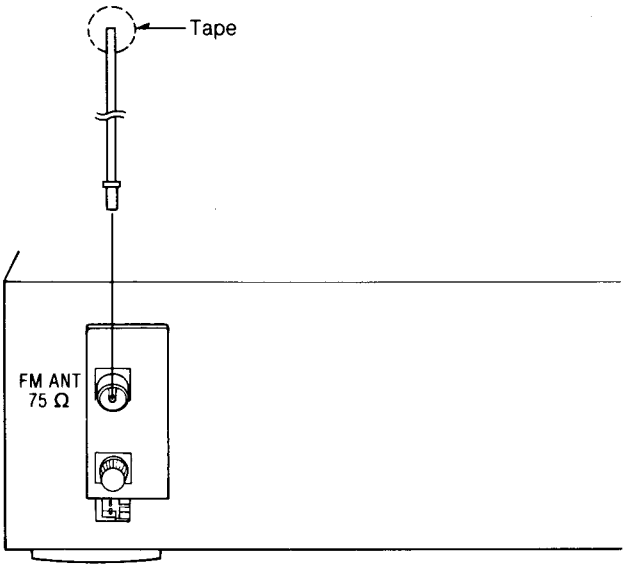
To connect a video deck with 21 pin scart terminal

■ ANTENNA CONNECTIONS

FM indoor antenna (included)

This antenna is normally sufficient for reception of FM broadcasts.

FM indoor antenna
(included)



Attach to a wall (using a tape) facing in the direction of best reception.
For best reception sound quality:
An FM outdoor antenna is recommended.
Disconnect the antenna if an FM outdoor antenna is installed.

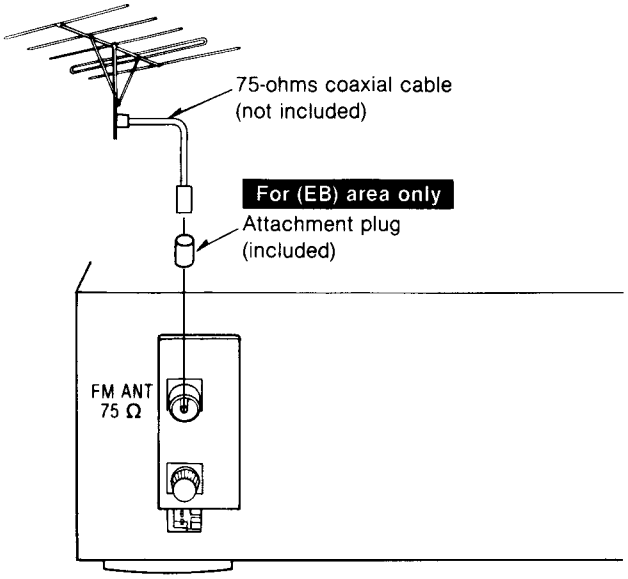
FM outdoor antenna (not included)

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the FM indoor antenna (included) does not provide satisfactory reception.

Note
An outdoor antenna should be installed by a qualified technician only.

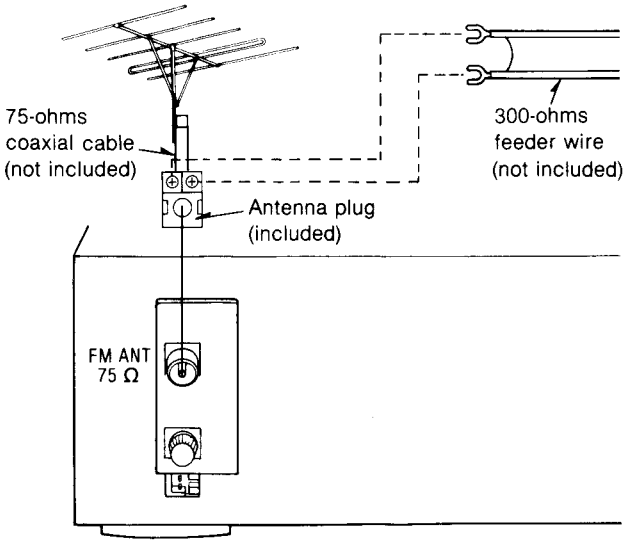
For (E, EB, EG) areas.

FM outdoor antenna
(not included)



For (G, GN) areas.

FM outdoor antenna
(not included)



See page 8 for using the antenna plug (included).

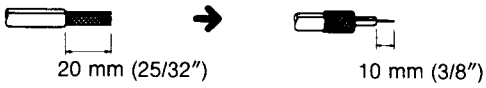
■ How to use the antenna plug (included)

(For (G, GN) areas.)

Two types of wire are most commonly used for connection from the antenna: 300-ohms parallel feeder wire or 75-ohms coaxial cable. For best resistance to outside interference, the use of 75-ohms coaxial cable is suggested.

To connect a 75-ohms coaxial cable

① Remove a piece of the outer vinyl insulator.

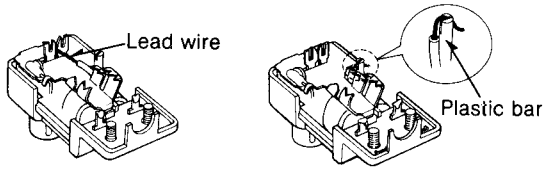


② Remove the cover while pulling the tabs.

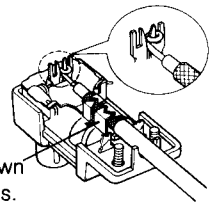
Note

If the tabs are pulled too hard, the casing may be damaged.

③ Remove the lead wire and clamp it with the plastic bar.



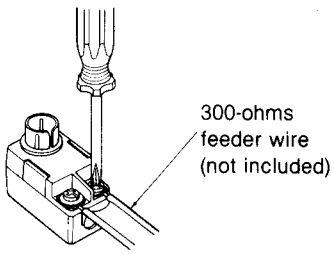
④ Install the coaxial cable.



Clamp the cable conductor, and wind it on so that it doesn't contact anything else.

⑤ Attach the cover.

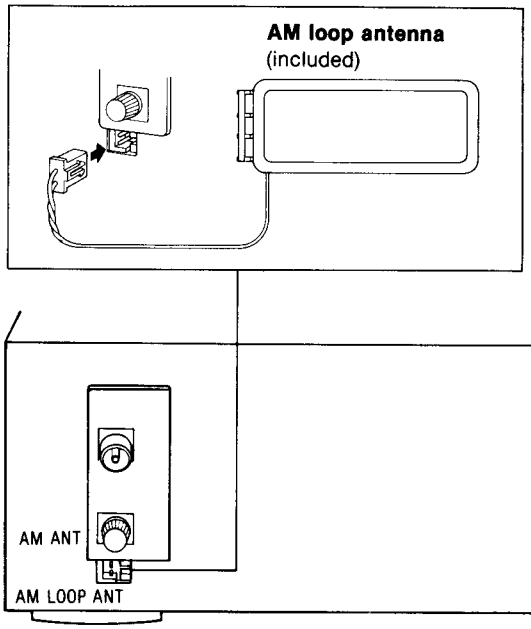
To connect a 300-ohms feeder wire



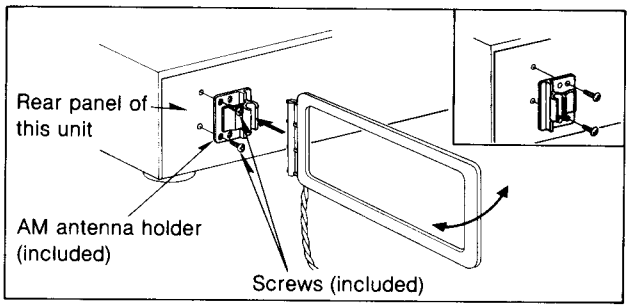
Loosen the screw to connect the feeder wire and tighten it to secure the connection.

AM loop antenna (included)

This antenna is normally sufficient for reception of MW/LW broadcasts.

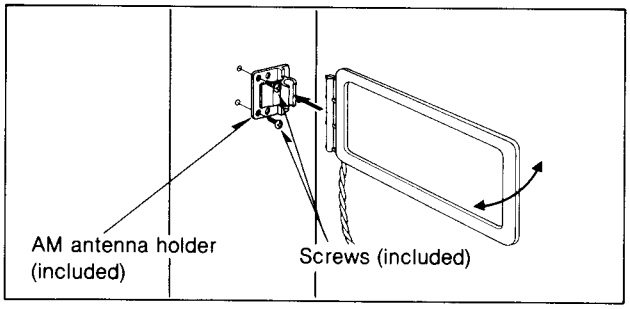


Connect the AM loop antenna to the AM loop antenna terminals, and mount it vertically to the rear panel of this unit.



When mounting the antenna to a column, a wall or rack

Mount it vertically.

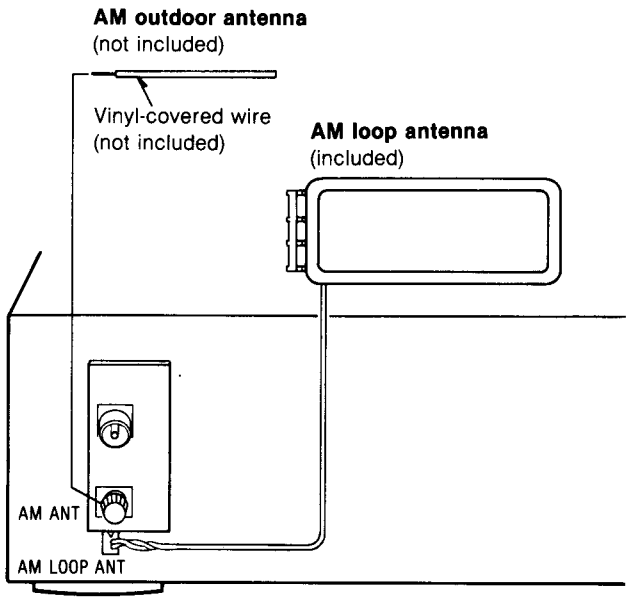


Pay attention to the following points when mounting the antenna.

- Do not mount it horizontally (doing so will impair reception).
- Do not mount it close to power cords, speaker wires or metal surfaces (doing so will result in noise).
- Do not mount it close to a tape deck. When the tape deck is being used, chirping or beeping sounds may result.

AM outdoor antenna (not included)

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the AM loop antenna (included) does not provide satisfactory reception.



Use 5 – 12 m (16 – 40 ft.) of vinyl-covered wire horizontally at the window, or the convenient location.

When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

Note

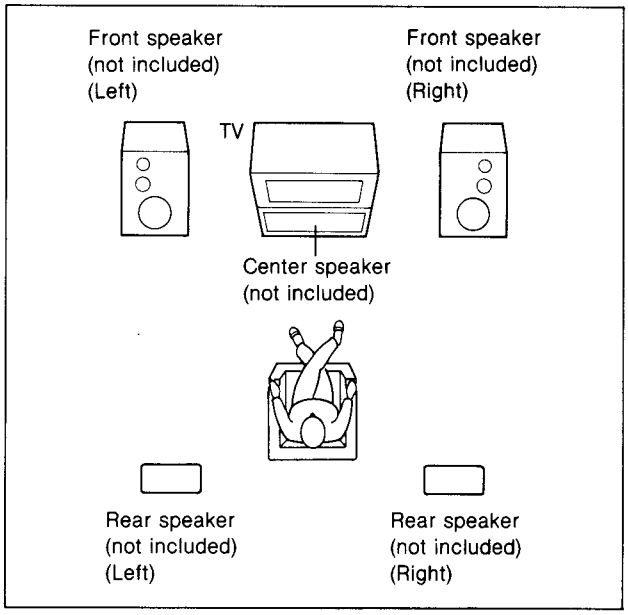
Be sure to connect the AM loop antenna even when an outdoor antenna is used.

■ SPEAKER CONNECTIONS

Placement of speakers

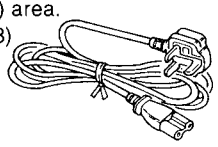
As well as enjoying normal stereo reproduction with both the left and right front speakers connected, a center speaker and rear speakers can also be connected to the main unit in order to enjoy playback using the Dolby Pro-Logic Systems.

The illustration below shows where to place the speakers when enjoying sound with Dolby Pro-Logic systems.
The listening position at which the effect is the greatest is a position slightly to the rear of a center position of five-speaker systems.
However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.

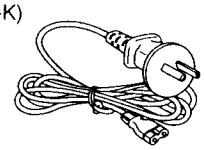


■ ACCESSORIES

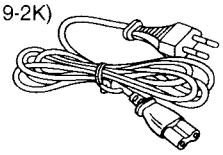
- AC power supply cord .... 1 pc.
  FOR (EB) area.
  (VJA0733)



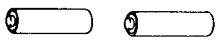
  For (GN) area.
  (RJA0036-K)



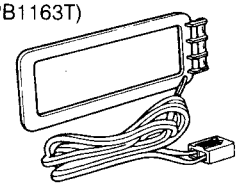
  For (E, EG, G) areas.
  (RJA0019-2K)



- Batteries "AAA" (R03/UM-4) for remote control transmitter ..... 2 pcs.



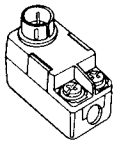
- AM loop antenna..... 1 pc.
  (SPB1163T)



- AM antenna holder..... 1 pc.
  (SMA233-1M)

- Screws..... 2 pcs.
  (XTN3+10AFZ)

- Antenna plug ..... 1 pc.
  For (G, GN) areas.
  (RFE0014)



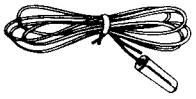
- Remote control transmitter ..... 1 pc.
  (RAK-SA009XH)

(RAK-SA009XH)

- Attachment plug ..... 1 pc.
  For (EB) area.
  (SJP9009)

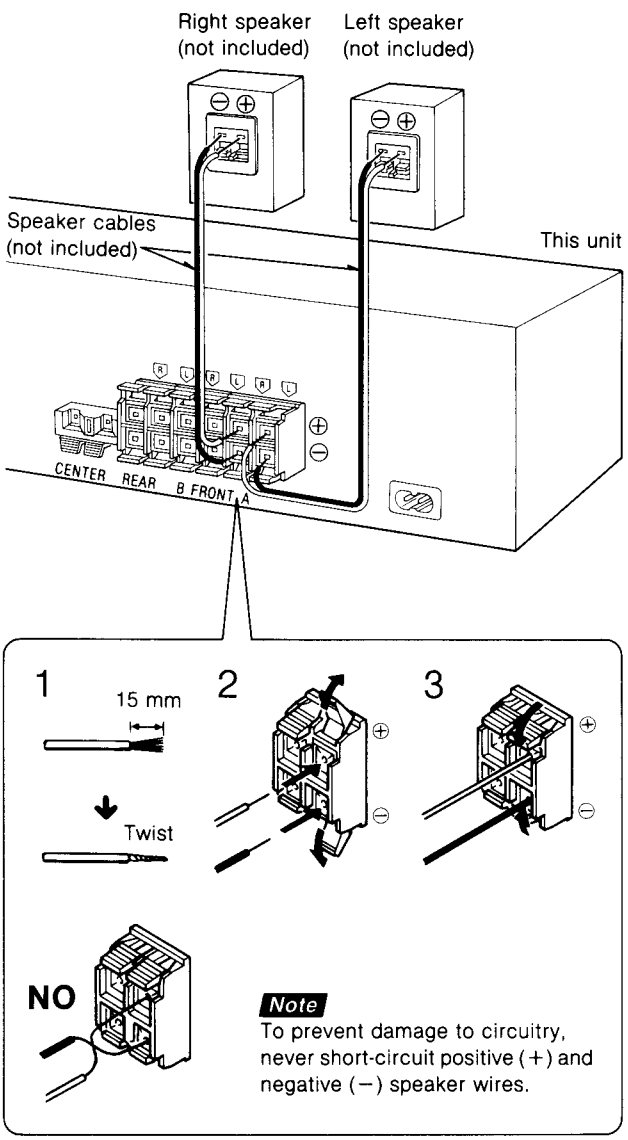
- Power plug adaptor ..... 1 pc.
  For (G) area.
  (SJP5213-2)

- FM indoor antenna..... 1 pc.
  (RSA0007)



Note: These are available on sale route.

Connection of front speakers



■ "B" terminals

For connection to a second pair of speakers.

■ Speaker impedance

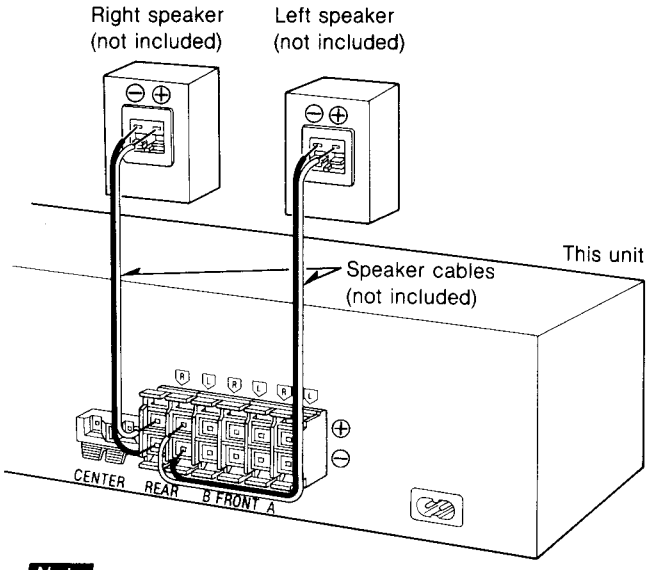
When only the "A" or only the "B" speakers are connected:

The impedance of the speaker used with this unit must be 4 – 16 Ω.

When both the "A" and the "B" speakers are connected simultaneously:

The impedance of the speaker used with this unit must be 8 – 16 Ω.

Connection of rear speakers



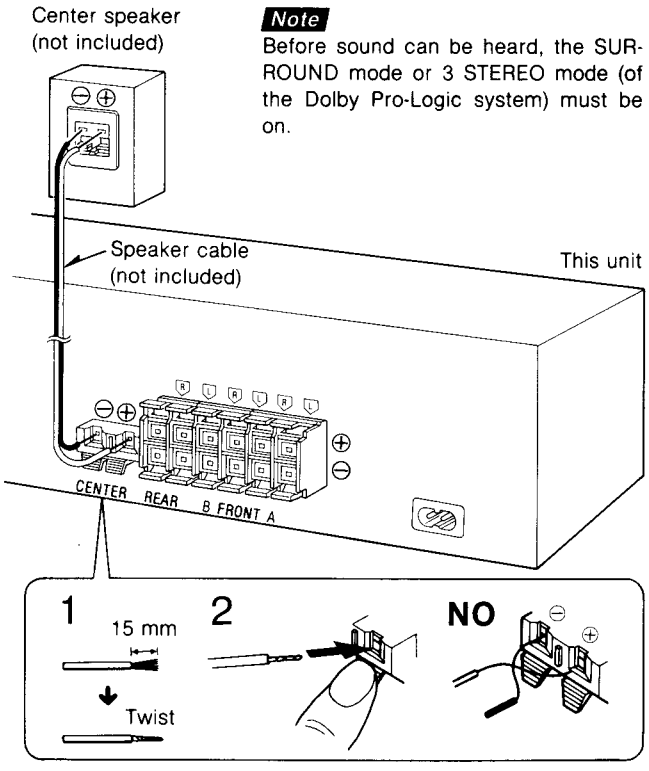
Note

Before sound can be heard, the SURROUND mode (of the Dolby Pro-Logic system) must be on and both rear speakers must be connected.

■ Speaker impedance

The impedance of any speaker used with this unit must be 4 – 16 Ω.

Connection of center speaker



Note

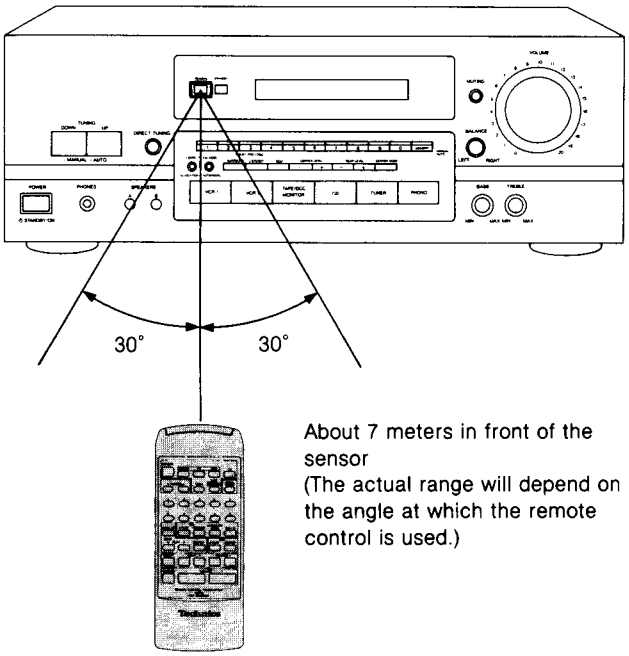
Before sound can be heard, the SURROUND mode or 3 STEREO mode (of the Dolby Pro-Logic system) must be on.

■ Speaker impedance

The impedance of any speaker used with this unit must be 4 – 16 Ω.

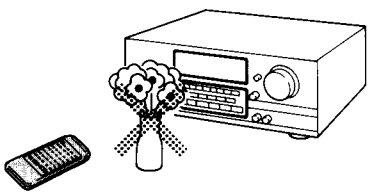
■ METHOD FOR USE

Use the remote control within 60 degrees and within 7 meters facing directly toward the receiver's remote control signal receptor.

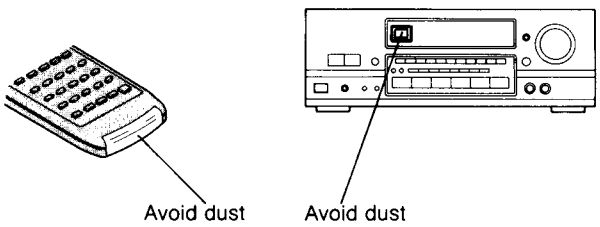


About 7 meters in front of the sensor
(The actual range will depend on the angle at which the remote control is used.)

Operation notes



Aim the remote control's transmission window toward the unit's sensor. Avoid any obstacles.



Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect performance.

The operation may not be correct if direct sunlight or another strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.

When operating a TV, VCR or a CD player (or CD changer) with a remote control sensor, face this remote control toward the remote control sensor of the unit to be operated.

■ REMOTE CONTROL OPERATION

This remote control transmitter can be used to operate units manufactured by this company other than this receiver unit, including CD players (or CD changers), tape decks and also TVs and VCRs.

Preparations before use

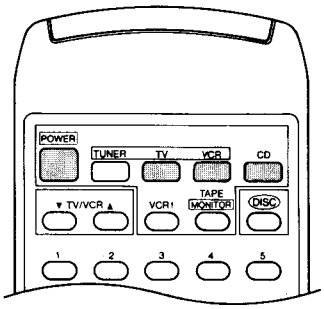
- Check the appropriate connection of the power cords and connection cables for the remote control in order to operate CD players (or CD changers) and tape decks correctly. (See page 8 of the operating instructions for the main unit.)
- Make sure that the power of each unit is set to the "ON" position, before beginning the operations.

Note

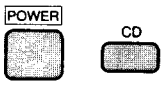
If you operate a TV, VCR or CD player (or CD changer) using this remote control, the unit may fail to operate due to the differing nature of the remote control signal.

If the remote control fails to operate:

It is necessary to reprogram the signal within the remote control by following this simple procedure.

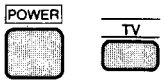


For CD player (or CD changer) operation



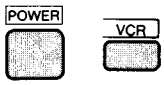
Press POWER and CD simultaneously, hold for 2 seconds.

For TV operation



Press POWER and TV simultaneously, hold for 2 seconds.

For VCR operation

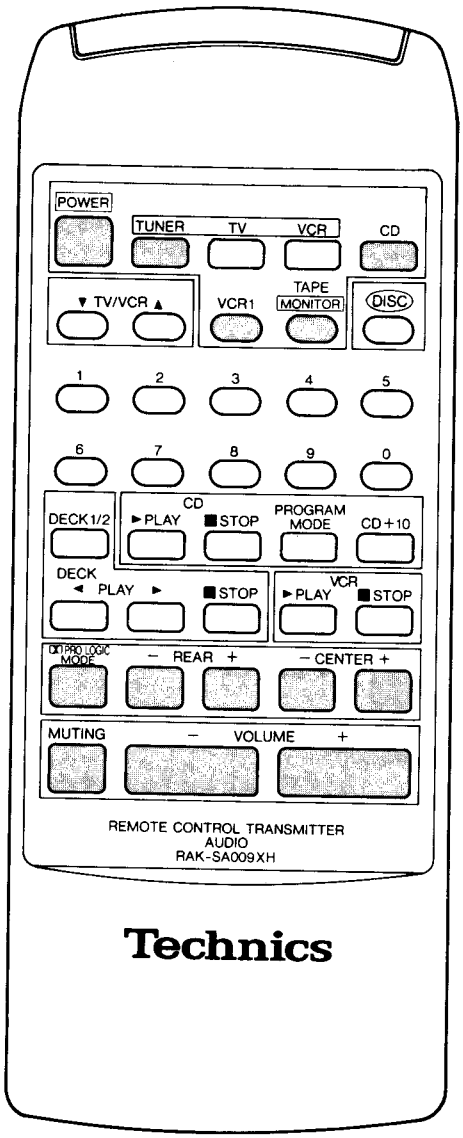


Press POWER and VCR simultaneously, hold for 2 seconds.

To restore the previous memory contents, carry out the same operations one more time.

Depending on the model, there may be cases where operation is still not possible even if the remote control signal is switched over due to differences in frequency range characteristics.

Operating the receiver



Basic operations

To turn the unit ON/OFF	TUNER → POWER Once the unit has been set to ON, it can be turned ON and OFF simply by pressing POWER. (See *Note* below.)
To turn the tape monitor function ON/OFF	TAPE MONITOR To listen to sources other than a tape or DCC, be sure to turn off the tape monitor indicator on the main unit.
To select an input source	TUNER CD VCR1
To select the Dolby Pro Logic mode	PRO LOGIC MODE Changes as follows each time the button is pressed. SURROUND → 3 STEREO → (OFF)
To adjust the output level of the rear speakers	PRO LOGIC MODE → REAR + **Select SURROUND.**
To adjust the output level of the center speaker	PRO LOGIC MODE → CENTER + **Select SURROUND or 3 STEREO.**
To mute the sound level	MUTING Press once more to return to the original volume.
To adjust the volume level	VOLUME +

Note

After carrying out the operation on the reverse page for turning the TV or VCR ON or OFF, always press TUNER before pressing POWER when turning the receiver ON and OFF.

To listen to radio broadcasts

TUNER → 1 2 3 4 5 / 6 7 8 9 0

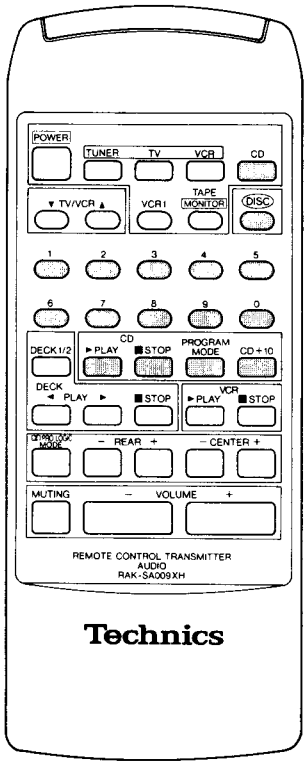
Specify the preset channel using the numeric buttons.

(Example: Channel 12)

1 → 2

(Within 2 sec.)

To listen to compact discs



Note

Selecting the desired disc(s) is only applicable to a Technics CD changer.

Sequential play

►PLAY

Direct access play

CD → DISC → 1 2 3 4 5 → 1 2 3 4 5 / 6 7 8 9 0 (CD+10)

Select the desired disc.

Select the desired track number.
To select a two-digit track number over 10, press CD+10 the necessary number of times and then one of the 1 – 0 buttons.

Play will start from the selected track.

Program play

PROGRAM MODE → CD → DISC → 1 2 3 4 5

Select program mode. (1) (2) **Select the desired disc. (3)**

Select the desired track number. (4) (1 2 3 4 5 / 6 7 8 9 0, CD+10)

Repeat the steps (1)–(4). ►PLAY

Delete play

(only for a Technics CD changer with delete play function)

PROGRAM MODE → CD → DISC → 1 2 3 4 5

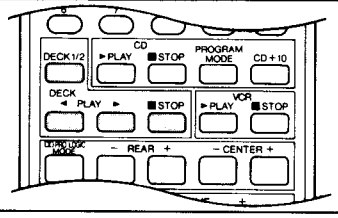
Select delete mode. (1) (2) **Select the desired disc. (3)**

Select the desired track number. (4) (1 2 3 4 5 / 6 7 8 9 0, CD+10)

Repeat the steps (1)–(4). ►PLAY

To stop play	■STOP — For program play and delete play, if this button is pressed while playback is stopped, all contents which have been input will be cleared.

To listen to tapes



DECK 1/2

Only when using a double cassette deck

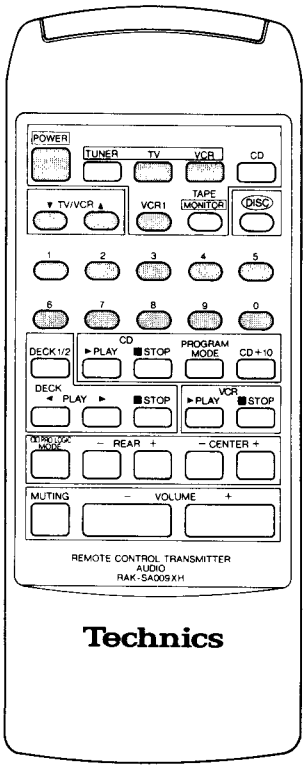
Select tape deck (DECK 1 or DECK 2)

The remote control indicator of the cassette deck is changed over each time the button is pressed.

◄ PLAY ► (Reverse) (Forward)

To stop play	■STOP

To watch TV broadcasts



To watch TV broadcasts with a VCR tuner

Facing toward the TV → TV → POWER
Turn ON the TV.

Facing toward the VCR → VCR → POWER
Turn ON the VCR.

Set the TV/VIDEO mode on the TV to "VIDEO".

Facing toward the receiver → VCR1

Facing toward the VCR → ▼ TV/VCR ▲
Select the desired channel.

To watch TV broadcasts with just a TV

Facing toward the TV → TV → POWER
Turn ON the TV.

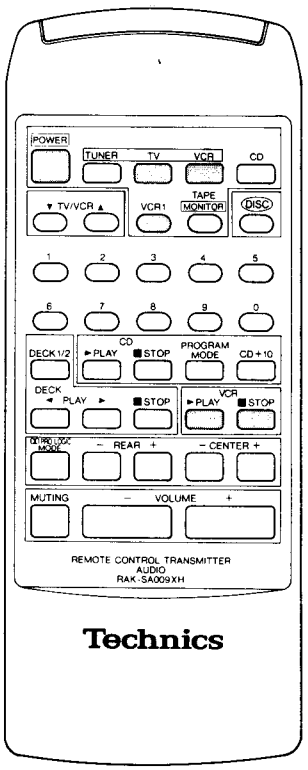
Set the TV/VIDEO mode on the TV to "TV".

Facing toward the TV → ▼ TV/VCR ▲
Select the desired channel.

To turn OFF the TV
TV → POWER

To turn OFF the VCR
VCR → POWER

To watch video tapes



Facing toward the TV → TV → POWER
Turn ON the TV.

Facing toward the VCR → VCR → POWER
Turn ON the VCR.

Set the TV/VIDEO mode on the TV to "VIDEO".

Facing toward the receiver → VCR1

Facing toward the VCR → ►PLAY

To stop play	■STOP

To turn OFF the TV
TV → POWER

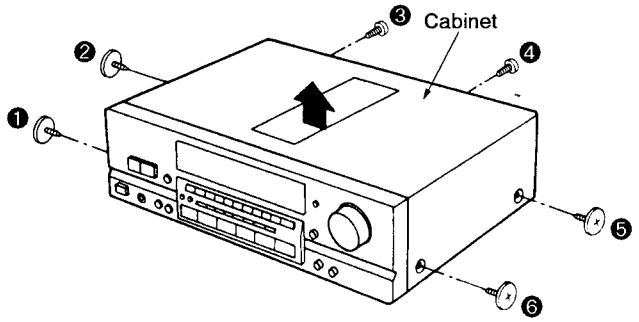
To turn OFF the VCR
VCR → POWER

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref.No. 1	Removal of the cabinet

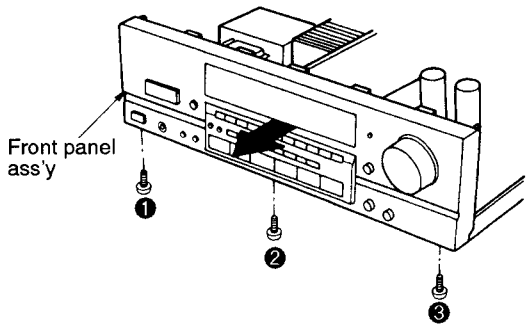
Procedure 1



• Remove the 6 screws(❶ ~ ❻).

Ref.No. 2	Removal of the front panel ass'y

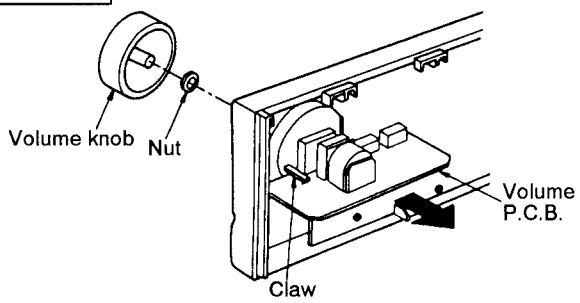
Procedure 1 → 2



1. Remove the 3 screws(❶ ~ ❸).
2. Remove the front panel ass'y in the direction of arrow.

Ref.No. 3	Removal of the volume P.C.B.

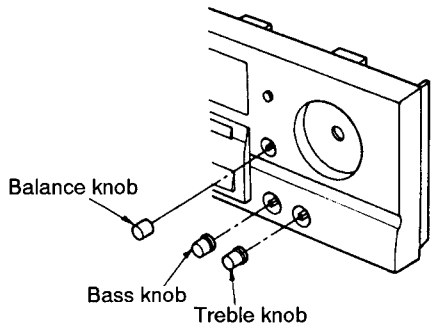
Procedure 1 → 2 → 3



1. Pull out the volume knob.
2. Remove the nut.
3. Release the 1 claw.
4. Remove the volume P.C.B. in the direction of arrow.

Ref.No. 4	Removal of the operation P.C.B., power switch P.C.B. and headphones jack P.C.B.

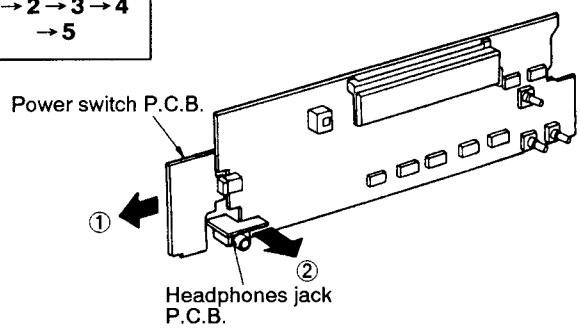
Procedure 1 → 2 → 3 → 4



1. Pull out the balance knob, bass knob and treble knob.

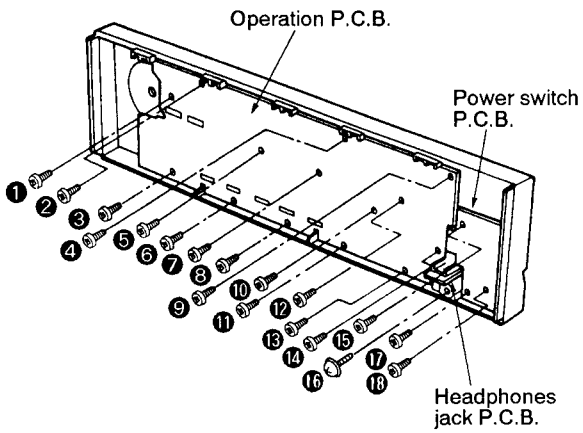
Ref.No. 5	Removal of the power switch P.C.B. and headphones jack P.C.B.

Procedure 1 → 2 → 3 → 4 → 5



■ POWER SWITCH P.C.B.
• Remove the power switch P.C.B. in the direction of arrow ①.

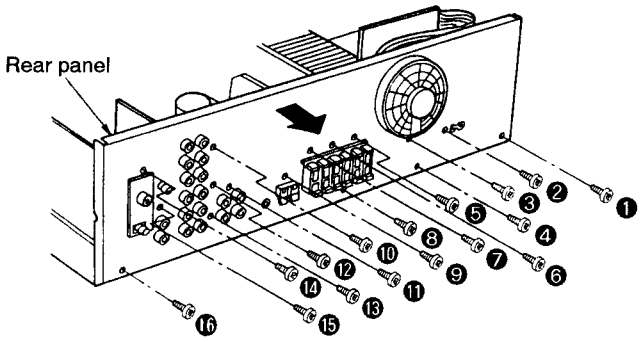
■ HEADPHONES JACK P.C.B.
• Remove the headphones jack P.C.B. in the direction of arrow ②.



2. Remove the 18 screws(❶ ~ ⓲).

Ref.No. 6	Removal of the rear panel

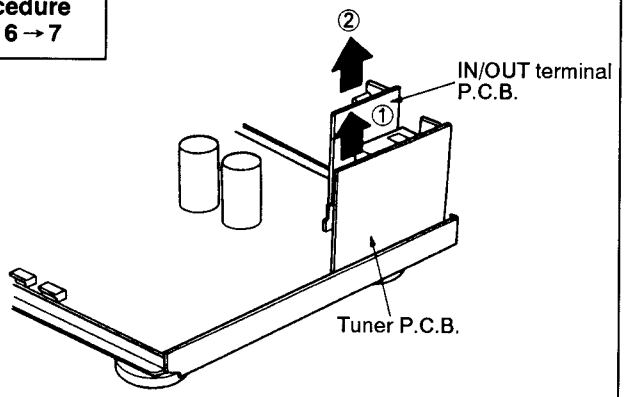
Procedure 1→6



1. Remove the 16 screws(❶~⑯).
2. Remove the rear panel in the direction of arrow.

Ref.No. 7	Removal of the tuner P.C.B. and IN/OUT terminal P.C.B.

Procedure 1→6→7



■ TUNER P.C.B.

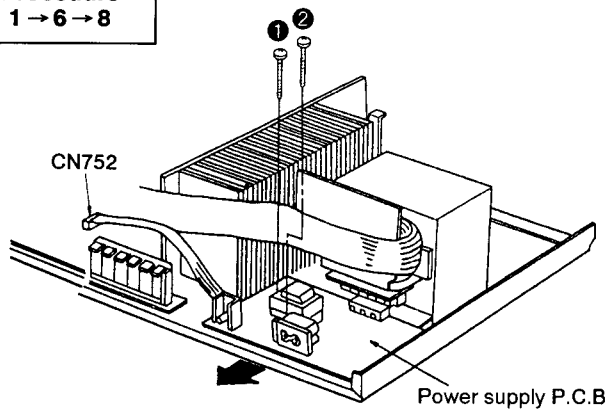
- Remove the tuner P.C.B. in the direction of arrow ①.

■ IN/OUT TERMINAL P.C.B.

- Remove the IN/OUT terminal P.C.B. in the direction of arrow ②.

Ref.No. 8	Removal of the power supply P.C.B.

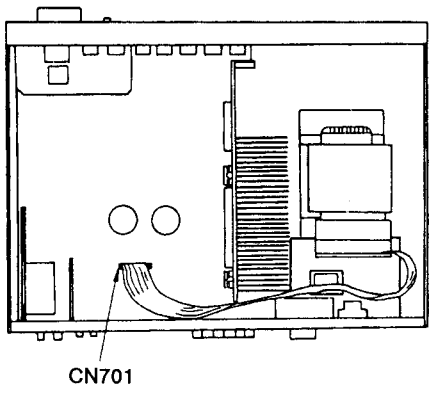
Procedure 1→6→8



1. Remove the 1 flat cable(CN752).
2. Remove the 2 screws(❶, ❷).
3. Remove the power supply P.C.B. in the direction of arrow.

Ref.No. 9	Removal of the power transformer P.C.B.

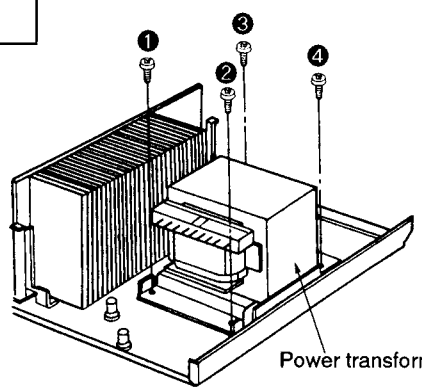
Procedure 1→9



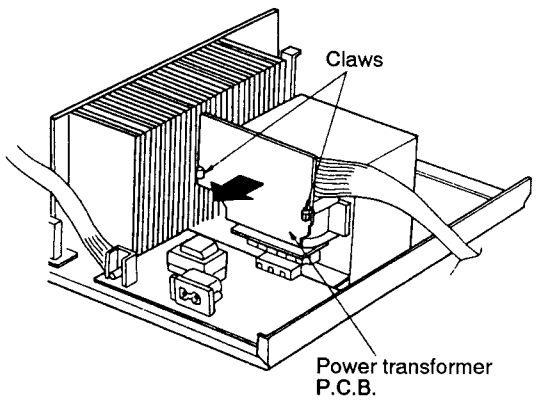
1. Remove the 1 flat cable(CN701).

Ref.No. 10	Removal of the power transformer

Procedure 1→6→8→9→10



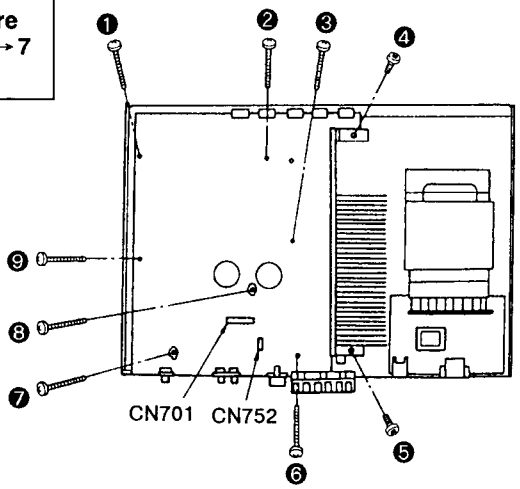
- Remove the 4 screws(❶~❹).



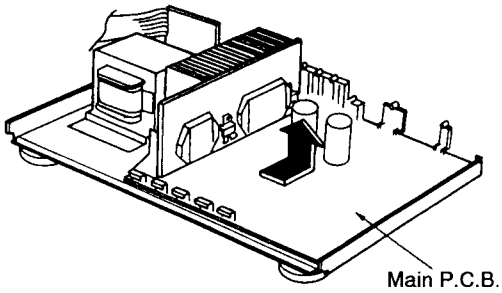
2. Remove the 2 claws.
3. Remove the power transformer P.C.B. in the direction of arrow.

Ref.No. 11	Removal of the main P.C.B.

Procedure
1 → 2 → 6 → 7 → 11



1. Remove the 2 flat cables(CN701, CN752).
2. Remove the 9 screws(❶ ~ ❾).

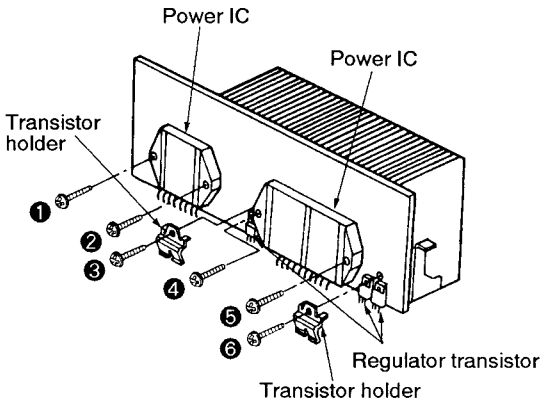


3. Remove the main P.C.B. in the direction of arrow.

Ref.No. 12	Removal of the power IC and regulator transistor

Procedure
1 → 2 → 6 → 7 → 11 → 12

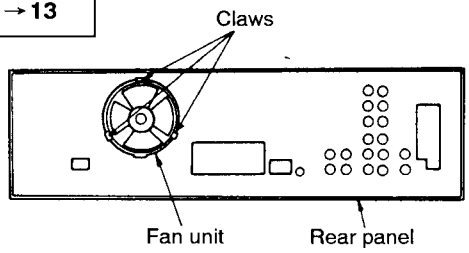
1. Unsolder the power IC or regulator transistor.
2. Remove the 6 screws(❶ ~ ❻).
3. Remove the 2 transistor holders.



- **When mounting the power IC or regulator transistor.**
  Apply silicone compound(RFKX0002) to the rear side of power IC or regulator transistor.

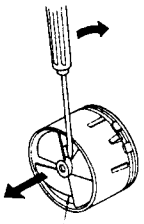
Ref.No. 13	Removal of the cooling fan motor

Procedure
1 → 6 → 13

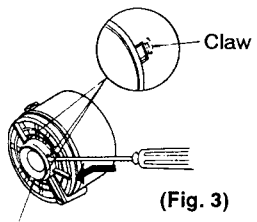


(Fig. 1)

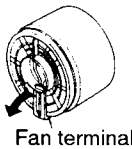
1. Release the 3 claws.(See **Fig. 1**)
2. Insert a screwdriver at the foot of the fan. Force it out of the motor shaft.(See **Fig. 2**)
3. Remove the fan cap by used ⊖ screwdriver. (See **Fig. 3**)
4. Remove the fan terminal cap in the direction of arrow. (See **Fig. 4**)
5. Remove the motor from the fan case. (See **Fig. 5**)
6. When mounting the motor, align the fan casing's projection with the hole of the motor.(See **Fig. 6**)



(Fig. 2)

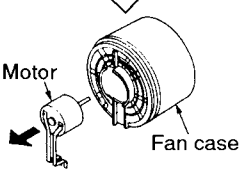


(Fig. 3)

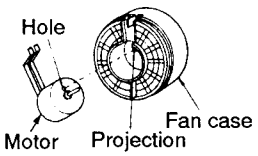


(Fig. 4)

Fan terminal cap

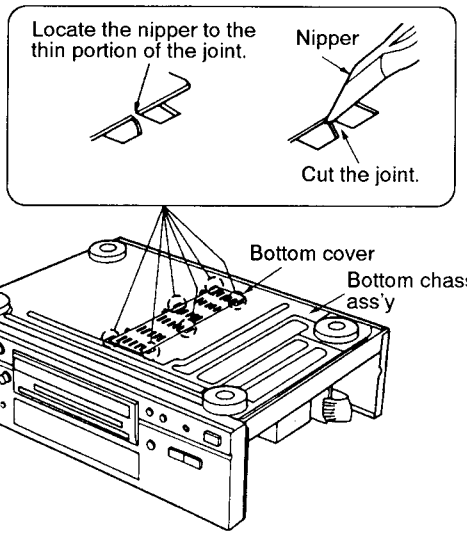


(Fig. 5)

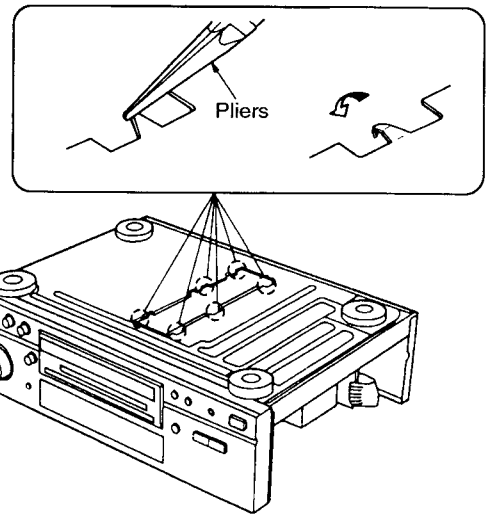


(Fig. 6)

■ HOW TO REPLACEMENT THE POWER IC AND REGULATOR IC



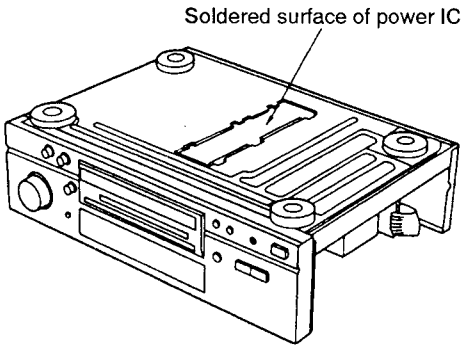
1. Cut the joints(6 portions) between bottom cover and bottom chassis ass'y with nipper.



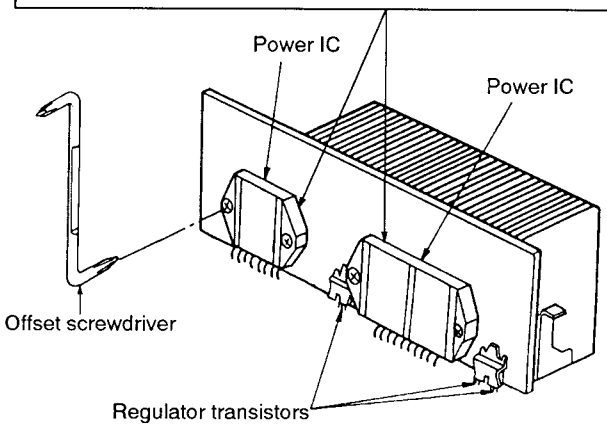
2. After cutting the joints(6 portions), bend the portions of the bottom chassis ass'y in the direction of arrow with pliers.

CAUTION

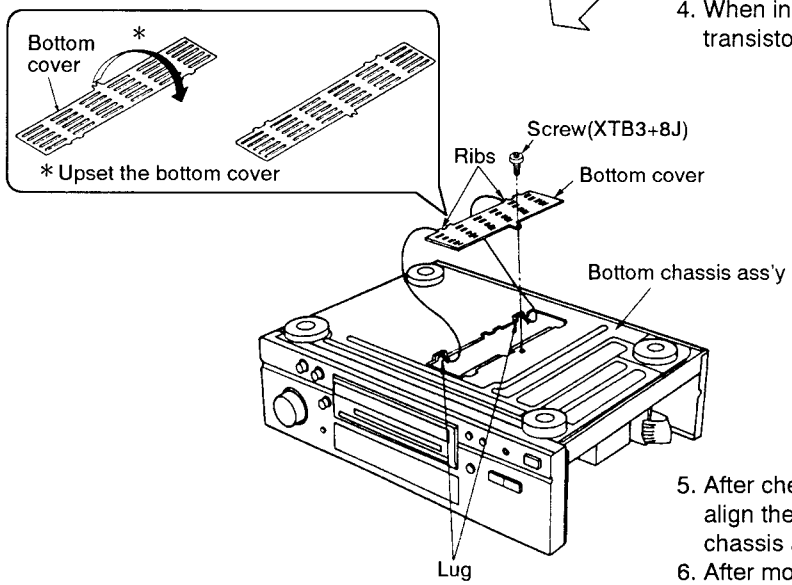
After replacing the power IC or regulator transistor, apply a sufficient quantity of compound grease (RFKX0002) between the heat sink and the power IC or regulator transistor. (Rediation of power IC & transistor)



3. When checking the soldered surface of power IC, perform as shown above.



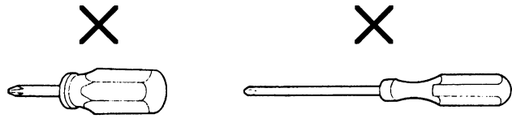
4. When installing or removing the power IC or regulator transistor, be sure to use an offset screwdriver.



5. After checking the power IC, upset the bottom cover and align the ribs of the bottom cover to the lugs on the bottom chassis ass'y.
6. After mounting the bottom cover on the bottom chassis ass'y, fix it with a screw(XTB3+8J).

CAUTION:

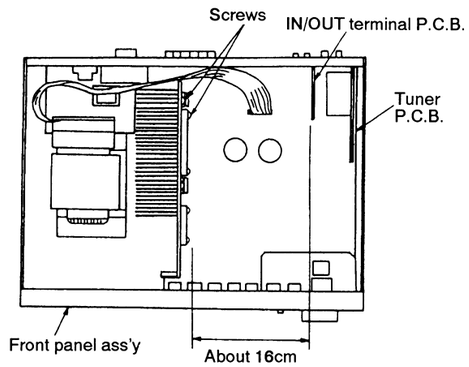
1. A long straight screwdriver cannot be used for removal or mounting since its long grip interferes with the neighboring P.C.B.(See Fig.1)
2. A short straight screwdriver may be used for removal, but cannot be used for mounting because the limited space in the unit will not allow sufficient tightening torque. (See Fig.2)



A short straight screwdriver　　A long straight screwdriver

Fig.2

3. Insufficient tightening will cause poor heat dissipation from the power IC and regulator transistor and, in the worst case, may lead their thermal breakdown. (See Fig.2)

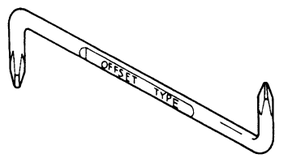


(A long straight screwdriver cannot be used.)

Fig.1

——OFFSET SCREWDRIVER——

• The PROTO offset screwdriver No.34 - ¼ is recommended for use in the application above.



No.	⊕	⊢ L ⊣
34¼	1 & 2	4¾″

• The address of PROTO International Sales is as follows.

PROTO®

Internatiotal Sales

International Sales Office
Stanley - Proto Industrial Tools
14117 Industrial Park Blvd.
Covington, GA 30209 U.S.A.
Fax: 706 - 786 - 4387
Phone: 706 - 787 - 3800

Australia, New Zealand & South Pacific
Stanley - Proto Industrial Tools
P.O.Box 10
400 Whitehorse Road
Nunrweding 3131
Victoria, Australia
Fax: 61 - 3 - 894 - 1173
Phone: 61 - 3 - 878 - 9244

Singapore, Indonesia, Philippines, Korea, Hong Kong, Malaysia, China.
Stanley - Proto Asia Pacific
12 Gul Drive
Singapore 2262
Fax: 65 - 861 - 3206
Phone: 65 - 862 - 0883

Thailand
Stanley - Proto Thailand Ltd.
1017 Moo 13 Bangnatrad Highway, Tambol Bankaew
Amphur Bangplee
Samutprakarn, Thailand
Fax: 66 - 2 - 316 - 6071
Phone: 66 - 2 - 316 - 8655

Japan
Stanley Works Japan
2 - 7 - 16 Hyakunin - Cho
Shinjuku - ku
Tokyo 160 Japan
Fax: 81 - 3 - 3360 - 8456
Phone: 81 - 3 - 3360 - 8458

Mexico
Herramientas Stanley S.A. DE C.V.
Apartado Postal 675
72030 Puebla, Pue, Mexico
Fax: 52 - 22 - 494 - 4880
Phone: 52 - 22 - 495 - 300

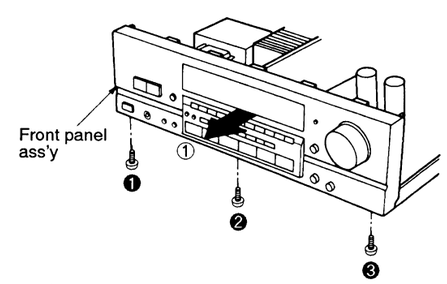
South & Central America, Puerto Rico, The Caribbian
Stanley Inter - America
2101 N.W. 84th Ave.
Miami, Florida 33122
Fax: 305 - 594 - 4261
Phone: 305 - 591 - 3828

Europe
Stanley - Proto Europe
Woodside, Sheffield
539PD
England
Fax: 44 - 742 - 739 - 038
Phone: 44 - 742 - 768 - 888

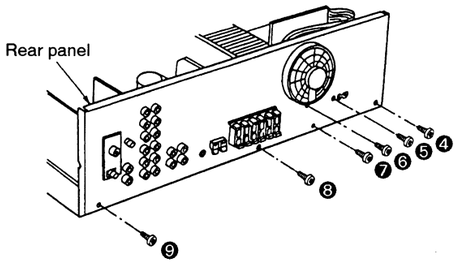
Canada
Stanley - Proto Canada
1100 Corporate Drive
Burlington, Ontario
Canada, L7L 5R6
Fax: 416 - 335 - 0075
Phone: 416 - 335 - 0075

Middle East, Mediterranean & Africa
Stanley - MEMA
Cory House The Rlng
Bracknell Berkshire
RG 12 1A2
England
Fax: 44 - 344 - 485 - 526
Phone: 44 - 344 - 51813

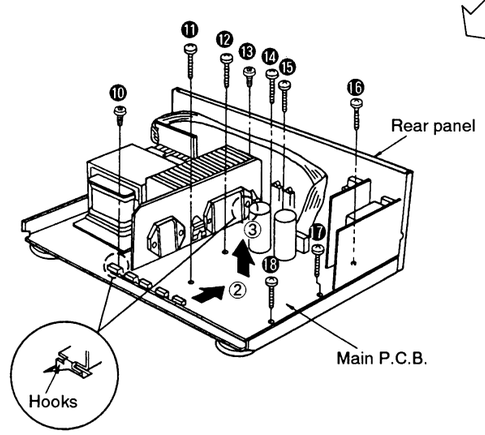
■ HOW TO CHECK THE MAIN P.C.B.



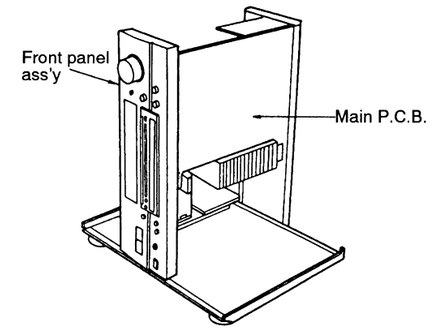
1. Remove the 3 screws(❶ ~ ❸).
2. Remove the front panel ass'y in the direction of arrow ①.



3. Remove the 6 screws(❹ ~ ❾).



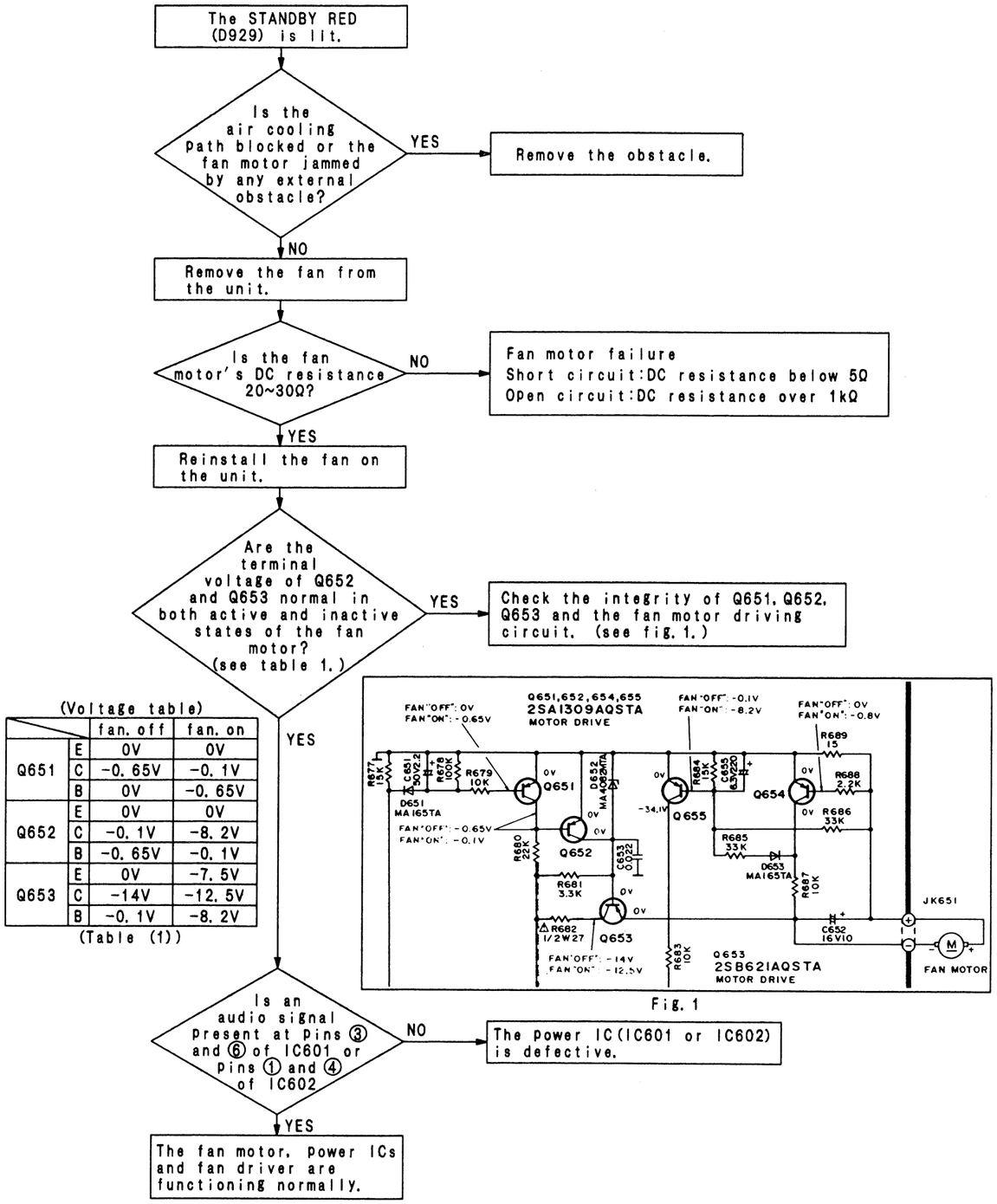
4. Remove the 9 screws(❿ ~ ⓲).
5. Release the 2 hooks by sliding the main P.C.B. in the direction of arrow ②, and then remove the main P.C.B. equipped with rear panel in the direction of arrow ③.



6. Reinstall the front panel ass'y to the main P.C.B.
7. When checking the soldered surface of the main P.C.B. and replacing the parts, do as shown in above.

■ FAN MOTOR TROUBLESHOOTING GUIDE

The Models SA-GX350/GX550/GX650 employ fan motor error sensing electronics.
If the cooling fan is not operation and its STANDBY light (D929) is on, check the fan motor and its STANDBY light (D929) is on, check the fan motor and its driving circuit.


The STANDBY RED (D929) is lit.
Is the air cooling path blocked or the fan motor jammed by any external obstacle?
YES
Remove the obstacle.
NO
Remove the fan from the unit.
Is the fan motor's DC resistance 20~30Ω?
NO
Fan motor failure
Short circuit:DC resistance below 5Ω
Open circuit:DC resistance over 1kΩ
YES
Reinstall the fan on the unit.
Are the terminal voltage of Q652 and Q653 normal in both active and inactive states of the fan motor? (see table 1.)
YES
Check the integrity of Q651, Q652, Q653 and the fan motor driving circuit. (see fig. 1.)
YES
Is an audio signal present at pins ③ and ⑥ of IC601 or pins ① and ④ of IC602
NO
The power IC (IC601 or IC602) is defective.
YES
The fan motor, power ICs and fan driver are functioning normally.

(Voltage table)

		fan. off	fan. on
Q651	E	0V	0V
	C	−0. 65V	−0. 1V
	B	0V	−0. 65V
Q652	E	0V	0V
	C	−0. 1V	−8. 2V
	B	−0. 65V	−0. 1V
Q653	E	0V	−7. 5V
	C	−14V	−12. 5V
	B	−0. 1V	−8. 2V

(Table (1))

Fig. 1

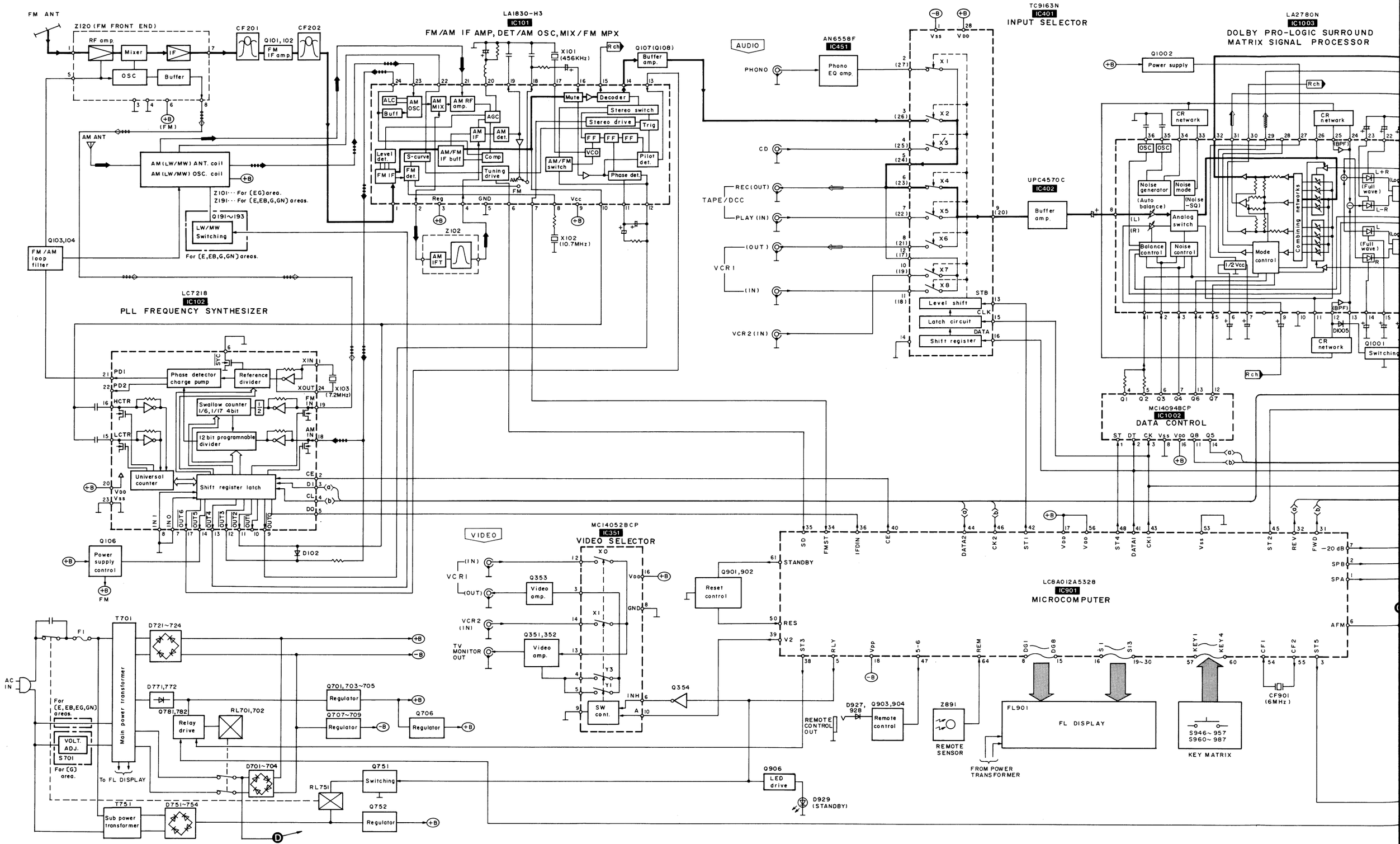
■ TERMINAL FUNCTION OF IC

• **IC901 (LC8A012A5328): Microcomputer**

Pin No.	Mark	I/O Division	Function
1 • 2	SPA • SPB	O	Speaker select control terminal
3	ST5	O	Level shift control terminal
4	RFM	—	Not used, open
5	RLY	O	Relay control terminal
6	AFM	O	Muting control terminal
7	−20dB	O	Muting control (−20dB) terminal
8 ∫ 15	DG1 ∫ DG8	O	Digit signal of FL display
16	S13	O	Segment signal of FL display
17	VDD	I	Power supply terminal
18	VPP	I	Power supply terminal of FL display
19 ∫ 30	S12 ∫ S1	O	Segment signal of FL display
31 • 32	FWD • REV	O	Rotation control terminal of volume motor
33	INI	—	Not used, connected to resistor
34	FMST	I	Stereo signal detect terminal
35	SD	I	Received signal detect terminal
36	IFDAIN	O	Serial data signal
37	LOUD	—	Not used, open
38	ST3	O	Level shift control terminal
39	V2	O	Video selector control terminal
40	CE	O	Chip enable terminal

Pin No.	Mark	I/O Division	Function
41	DATA1	O	Serial data signal
42	ST1	O	Level shift control terminal
43	CK1	O	Serial clock signal
44	DATA2	O	Serial data signal
45	ST2	O	Level shift control terminal
46	CK2	O	Serial clock Serial clock signal
47	5−6	O	Remote control terminal
48	ST4	O	Level shift control terminal
49	TEST1	—	Test terminal
50	RES	I	Reset detect terminal
51	XT1	—	Not used, connected to power supply
52	XT2	—	Not used, open
53	VSS	—	GND terminal
54	CF1	I	Crystal oscillator
55	CF2	O	Terminal (6MHz)
56	VDD	I	Power supply terminal
57 ∫ 60	KEY1 ∫ KEY4	I	Key matrix detect terminal
61	STANDBY	O	Power detect terminal
62 • 63	ENCODE A • ENCODE B	—	Not used, connected to power supply
64	REM	I	Remote control terminal

■ BLOCK DIAGRAM



LA2780N
IC1003
DOLBY PRO-LOGIC SURROUND
MATRIX SIGNAL PROCESSOR

VOLUME MOTOR
Drive
Direction select
BA6218
IC851
MOTOR DRIVE
VR501-1,2 (VOLUME)
VR502 (BALANCE)
UPC4570C
IC471
Tone amp.
Treble
Bass
Q503 (Q504)
Q505 (Q506)
Muting switch
SVI3206D
IC601
POWER AMP (FRONT)
NF
Output DC det.
Abnormal current det.
Muting circuit
D654
Q602
Relay drive
RL602
Q601
RL601
Q604
Switching
FAN MOTOR
Q651~655
Motor drive
FRONT SPEAKER
HEADPHONES
Q509 (Q510)
Q511 (Q512)
Muting switch
Notes:
: FM OSC SIGNAL
: AM (MW/LW) OSC SIGNAL
: REC OUT SIGNAL (Lch)
: REAR SPEAKER DRIVE SIGNAL (Lch)
: AM (MW/LW) SIGNAL
: FM/AF (FRONT SPEAKER DRIVE) SIGNAL (Lch)
: CENTER OUT SIGNAL
CR network
Noise mode
(Noise -SQ)
Analog switch
Noise control
Mode control
1/2Vcc
Combining networks
L+R (Log-diff) (Full wave)
L-R
L (Log-diff) (Full wave) R
Dual TC control
(BPF)
D1005
Q1001
Switching
+B
Rch
4094BCP
IC1002
CONTROL
LA2730
IC1401
DOLBY B NR
Noise reduction amp.
Control amp.
Rect.
Over shoot suppressor clipper
V/I Conv.
VREF
Input amp.
Buffer amp (X1)
Summing amp.
Output amp.
AN6554F
IC1404(1/4)
Buffer amp.
D933
D932
Switching
Q907
M50198P
IC1405
DIGITAL DELAY
Self reset
8K SRAM
Main control logic
Delay time control
L.P.F.2
L.P.F.1
AGND
DGND
CF1401 (3MHz)
AN6554F
IC1404(1/4)
Buffer amp.
0dB
-10dB
-40dB
Latch
Level shift
CK2
DATA2
ST2
Shift register
-20dB
-2dB
-70dB
TC9212P
IC1403
ATTENUATOR
M5218AP
IC551(1/2)
Flat amp.
VR501-4 (VOLUME)
VR501-3 (VOLUME)
Q552,554
Muting drive
Q551,553
Muting drive
SVI3102D
IC602
POWER AMP (REAR/CENTER)
NF
Drive
Power
Muting
Det.
Power on/off
Bias
D655
REAR SPEAKERS
L ch
R ch
CENTER SPEAKERS
KEY1
KEY4
CF1
CF2
ST5
S946~957
S960~987
KEY MATRIX
CF901 (6MHz)
Vss
ST2
REV
FWD
-20dB
SPB
SPA
AFM

■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

■ BEFORE REPAIR AND ADJUSTMENT

Disconnect AC power, Discharge both Power Supply Capacitors C703 and C704 through a 10Ω, 5W resistor to ground.

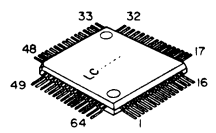
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdrive blade, for instance), as this may distroy solid state devices. After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at 50Hz/60Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230V/240V/110−127V/220−240V.

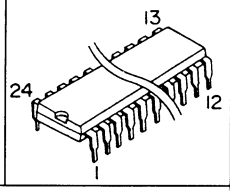
Power supply voltage	AC 230V		AC 240V		AC 120V (AC 110−127V)		AC 240V (AC 220−240V)	
Consumed current 50/60Hz	50Hz	150~400mA	50Hz	160~420mA	50Hz	300~800mA	50Hz	150~400mA
	60Hz	120~320mA	60Hz	128~336mA	60Hz	240~640mA	60Hz	120~320mA

■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

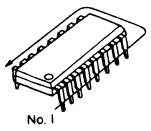
LC8A012A5328



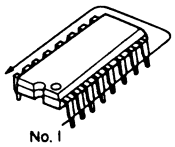
M50198P

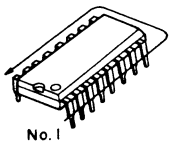


M5218AP	8Pin
LA1830-H3	24Pin
LC7218	24Pin

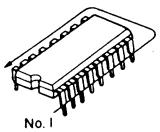


AN6554F	14Pin
LA2730	16Pin



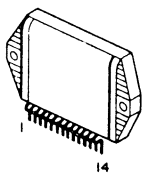


AN6558-FSG	8Pin
UPC4570C	8Pin
MC14052BCP	16Pin
MC14094BCP	16Pin
LA2780N	36Pin

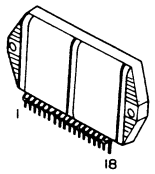


TC9212P	20Pin
TC9163N	28Pin

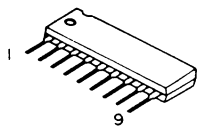
SVI3102D



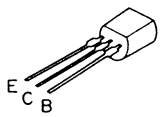
SVI3206D



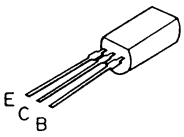
BA6218

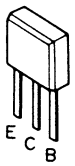


2SB621AQSTA
2SC2631QRSTA



2SC3940AQSTA

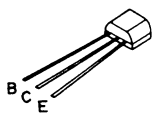




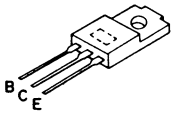
2SA1309AQSTA
2SC2787LTA
2SC2785FETA
2SC3311AQSTA
UN411FTA
UN4113TA
UN4211TA
UN4213TA

UN421FTA
UN4214TA

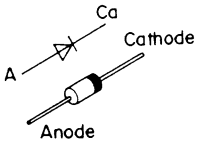
2SC3327ABTP



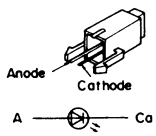
2SB1187DEF
2SD1761DEF

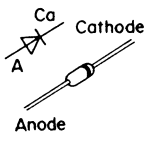


P300DLF

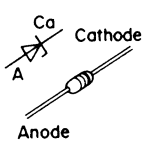


LN018304P

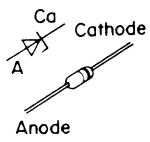




MA165TA
MA700ATA
1SS291TA
1SR35200TB



MA4030MTA
MA4039MTA
MA4051MTA
MA4056MTA
MA4062MTA
MA4068MTA
MA4075MTA



MA4150MTA
MA4220MTA
MA4240MTA

■ SCHEMATIC DIAGRAM (Parts list on pages 54~60.)

(This schematic diagram may be modified at any time with the development of new technology.)

Note 1:

- **S701** : Voltage adjustment switch.
- **S946** : Numeric (5) switch.
- **S947** : Center level adjust (CENTER LEVEL −) switch.
- **S948** : Test signal ON/OFF (TEST) switch.
- **S949** : Numeric (4) switch.
- **S950** : Numeric (6) switch.
- **S951** : Center level adjust (CENTER LEVEL +) switch.
- **S952** : Numeric (7) switch.
- **S953** : Rear level adjust (REAR LEVEL −) switch.
- **S954, 955** : Input select switches. [S954: CD, S955: TUNER]
- **S956** : Center mode select (CENTER MODE) switch.
- **S957** : Numeric (9) switch.
- **S960** : Rear level adjust (REAR LEVEL +) switch.
- **S961** : Numeric (8) switch.
- **S962** : Numeric (0) switch.
- **S964** : Input select (PHONO) switch.
- **S966** : Memory (MEMORY) switch.
- **S967** : Muting (MUTING) switch.
- **S970** : Tape/DCC monitor (TAPE/DCC [MONITOR]) switch.
- **S971** : Input select (VCR2) switch.
- **S972** : Input select (VCR1) switch.
- **S973** : Speaker select (B) switch.
- **S974** : FM mode select (FM MODE) switch.
- **S975** : Band select (BAND) switch.
- **S976** : Direct tuning (DIRECT TUNING) switch.
- **S977** : Tuning (TUNING −) switch.
- **S978** : Power (POWER) switch.
- **S980** : Dolby pro logic 3 STEREO ON/OFF (3 STEREO) switch.
- **S981** : Speaker select (A) switch.
- **S982** : Dolby pro logic surround ON/OFF (SURROUND) switch.
- **S983** : Numeric (3) switch.
- **S984** : Numeric (2) switch.
- **S985** : Numeric (1) switch.
- **S987** : Tuning (TUNING +) switch.

- Signal line
  - : FM OSC signal
  - : AM (MW/LW) OSC signal
  - : Rec out signal (Lch)
  - : Rear speaker drive signal (Lch)
  - : Positive voltage lines
  - : Negative voltage lines
  - : FM signal
  - : AM (MW/LW) signal
  - : AF signal (Lch)
  - : Center speaker drive signal

- Important safety notice

Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used as occation calls. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- The supply parts number is described alone in the replacement parts.

Part No.	Original Part No.	Supply Part No.
Z891	RCDHC-278-E	RCDHC-278

- All voltage values shown in circuitry are DC voltage in FM signal (Stereo signal) reception mode.

*Figures in ( ) Stand for DC-voltage in AM (MW/LW) signal reception mode.

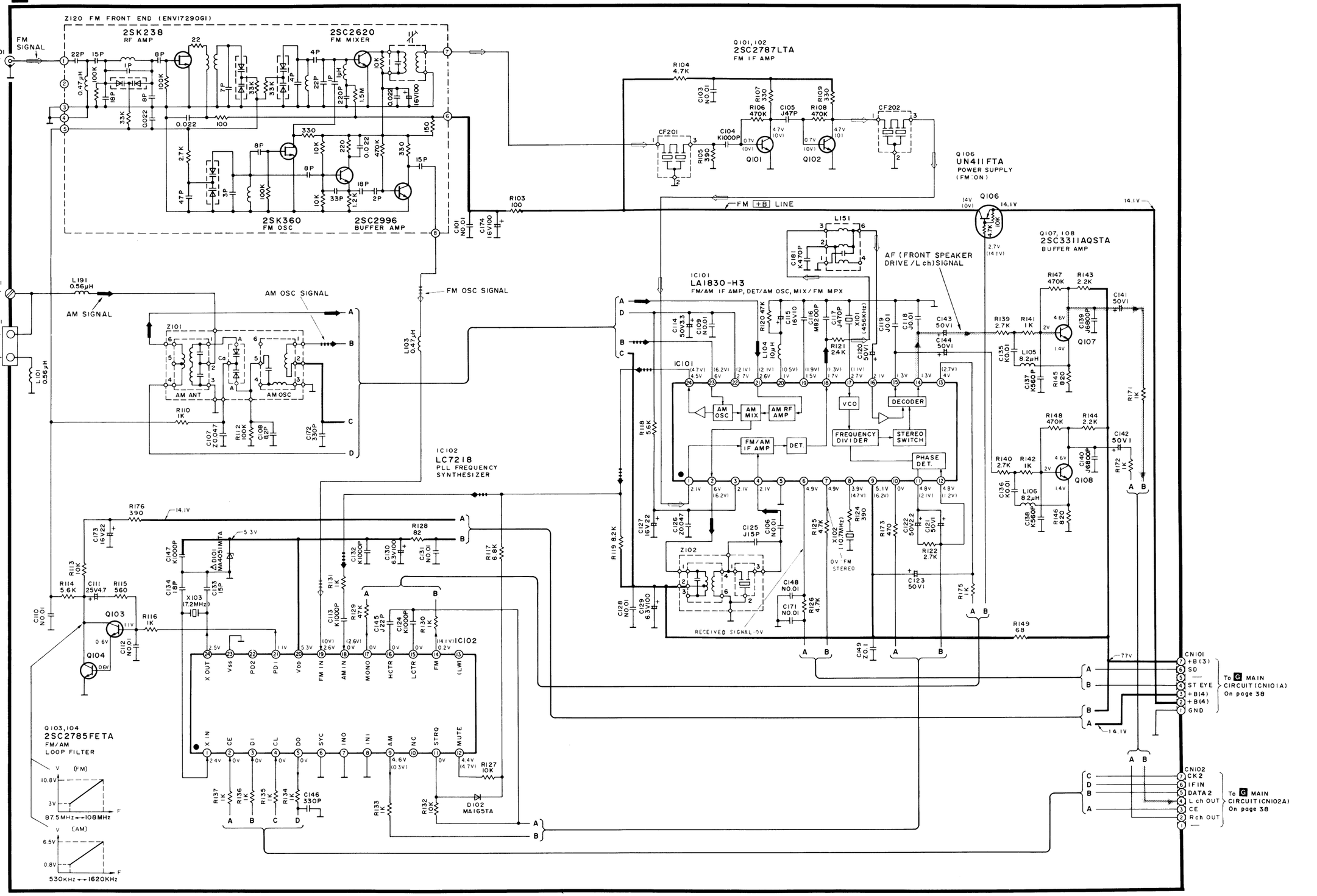
*Figures in [ ] Stand for DC-volgate in LW signal reception mode.

- **Caution!**

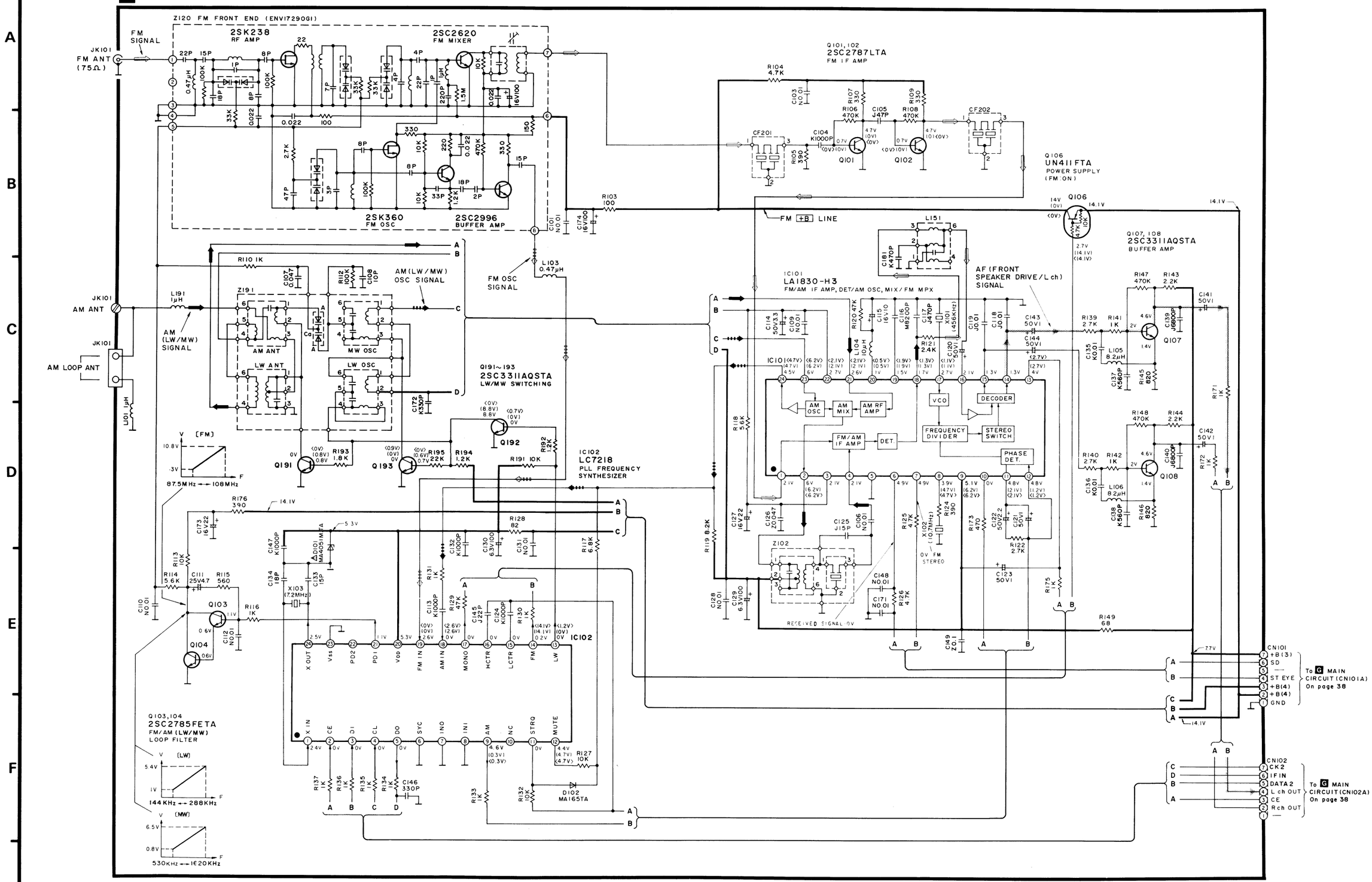
IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.

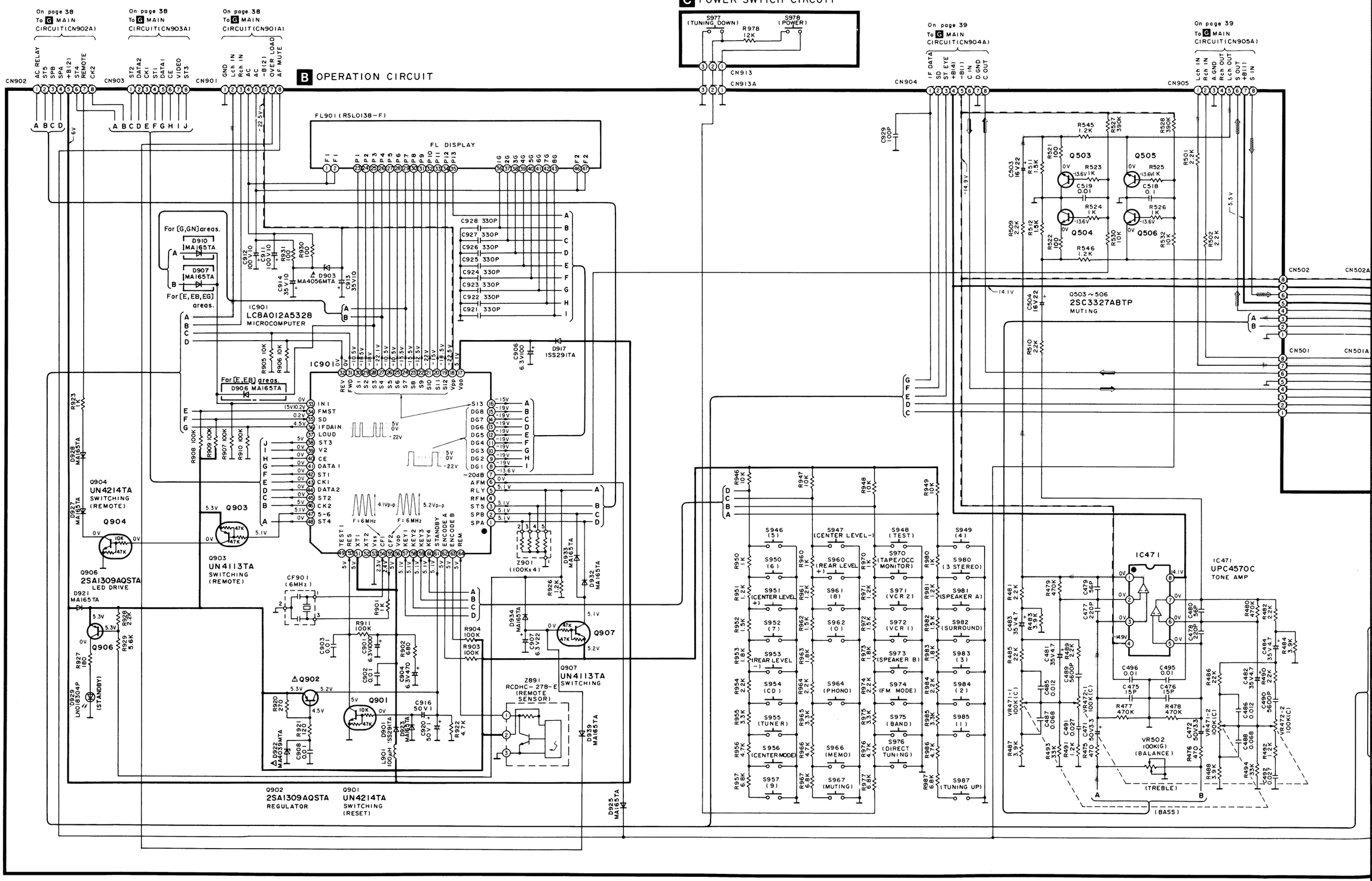
- Cover the parts boxes made of plastics with alminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.

A TUNER CIRCUIT For [EG] area.



A TUNER CIRCUIT For [E,EB,G,GN] areas.




B OPERATION CIRCUIT
C POWER SWITCH CIRCUIT
S977 (TUNING DOWN)
S978 (POWER)
R978 12K
CN913
CN913A
On page 38 To G MAIN CIRCUIT(CN902A)
On page 38 To G MAIN CIRCUIT(CN903A)
On page 38 To G MAIN CIRCUIT(CN901A)
On page 39 To G MAIN CIRCUIT(CN904A)
On page 39 To G MAIN CIRCUIT(CN905A)
CN902
CN903
CN901
CN904
CN905
AC RELAY
ST5
SPB
SPA
+B(12)
ST4
REMOTE
CK2
ST2
DATA2
CKI
STI
DATAI
CE
VIDEO
ST3
GND
Lch IN
Rch IN
AC
AC
-B(12)
OVER LOAD
AF MUTE
I.F DATA
SD
ST EYE
+B(4)
+B(1)
C IN
D.GND
C OUT
Lch IN
Rch IN
A.GND
Rch OUT
Lch OUT
S OUT
+B(1)
S IN
FL901(RSL0138-F)
FL DISPLAY
For [G,GN] areas.
D910 MA165TA
D907 MA165TA
For [E,EB,EG] areas.
For [E,EB] areas.
D906 MA165TA
IC901
LC8A012A5328
MICROCOMPUTER
IC901
D903 MA4056MTA
D917 ISS291TA
C928 330P
C927 330P
C926 330P
C925 330P
C924 330P
C923 330P
C922 330P
C921 330P
C912 100 16V
C911 100 10V
R931 100
R930 100
C914 35V10
C913 35V10
C906 6.3V100
R905 10K
R906 10K
R908 100K
R909 100K
R907 100K
R910 100K
R923 1K
D928 MA165TA
D927 MA165TA
Q904
UN4214TA
SWITCHING
(REMOTE)
Q903
UN4113TA
SWITCHING
(REMOTE)
Q906
2SA1309AQSTA
LED DRIVE
D921 MA165TA
R928 2.2K
R929 5.6K
R927 180
D929 LN018304P
(STANDBY)
Q902
2SA1309AQSTA
REGULATOR
Q901
UN4214TA
SWITCHING
(RESET)
CF901 (6MHz)
R911 100K
R903 100K
R904 100K
C903 0.01
C901 6.3V1000
C902 0.01
R902 680
C904 6.3V470
C916 50V1
R922 4.7K
L901 100μH
D901 ISS291TA
D922 MA4039MTA
C908 0.01
R921 120
R920 270
D924 MA165TA
D925 MA165TA
D926 MA165TA
D932 MA165TA
D933 MA165TA
D934 MA165TA
D939 MA165TA
Z901 (100K×4)
Z891 RCDHC-278-E (REMOTE SENSOR)
C907 6.3V22
R926 1.2K
R934 1.2K
Q907
UN4113TA
SWITCHING
Q503
Q504
Q505
Q506
0503~506
2SC3327ABTP
MUTING
C503 16V22
C504 16V22
C519 0.01
C518 0.1
R501 2.2K
R502 2.2K
R509 2.2K
R510 2.2K
R512 1.5K
R513 1.5K
R521 100
R522 100
R523 1K
R524 1K
R525 1K
R526 1K
R527 390K
R528 390K
R529 10K
R530 10K
R532 10K
R545 1.2K
R546 1.2K
C929 100P
CN501
CN501A
CN502
CN502A
R946 10K
R947 10K
R948 10K
R949 10K
S946 (5)
S947 (CENTER LEVEL-)
S948 (TEST)
S949 (4)
S950 (6)
S960 (REAR LEVEL +)
S970 (TAPE/DCC MONITOR)
S980 (3 STEREO)
S951 (CENTER LEVEL +)
S961 (8)
S971 (VCR 2)
S981 (SPEAKER A)
S952 (7)
S962 (0)
S972 (VCR 1)
S982 (SURROUND)
S953 (REAR LEVEL -)
S963 (PHONO)
S973 (SPEAKER B)
S983 (3)
S954 (CD)
S964 (PHONO)
S974 (FM MODE)
S984 (2)
S955 (TUNER)
S965 (MEMO)
S975 (BAND)
S985 (1)
S956 (CENTER MODE)
S966 (MEMO)
S976 (DIRECT TUNING)
S957 (9)
S967 (MUTING)
S987 (TUNING UP)
IC471
UPC4570C
TONE AMP
VR502 100K(G) (BALANCE)
(TREBLE)
(BASS)

15 16 17 18 19 20 21 22 23 24 25

C POWER SWITCH CIRCUIT

S977 (TUNING DOWN) S978 (POWER) R978 12K CN913 CN913A

On page 39 To G MAIN CIRCUIT(CN904A) CN904 IF DATA SP EYE +B(I) -B(I) C IN D GND C OUT

On page 39 To G MAIN CIRCUIT(CN905A) CN905 Lch IN Rch IN A GND Lch OUT S OUT +B(I) S IN

D VOLUME CIRCUIT

IC551 M5218AP FLAT AMP

(VOLUME) VR501-4 VR501-3 VR501-2 VR501-1 MOTOR

IC851 BA6218 MOTOR DRIVE

DIRECTION SELECT DRIVE

Q503 Q505 Q504 Q506 2SC3327ABTP MUTING

IC471 UPC4570C TONE AMP

VR502 100K(G) (BALANCE) (TREBLE) (BASS)

Q907 UN4113TA SWITCHING

Z891 RCDHC-278-E (REMOTE SENSOR)

Z901 (100Kx4)

S946 (5) S947 (CENTER LEVEL-) S948 (TEST) S949 (4)
S950 (6) S960 (REAR LEVEL +) S970 (TAPE/DCC MONITOR) S980 (3 STEREO)
S951 (CENTER LEVEL +) S961 (8) S971 (VCR 2) S981 (SPEAKER A)
S952 (7) S962 (0) S972 (VCR 1) S982 (SURROUND)
S953 (REAR LEVEL -) S963 (SPEAKER B) S973 (SPEAKER B) S983 (3)
S954 (CD) S964 (PHONO) S974 (FM MODE) S984 (2)
S955 (TUNER) S975 (BAND) S985 (1)
S956 (CENTER MODE) S966 (MEMO) S976 (DIRECT TUNING)
S957 (9) S967 (MUTING) S987 (TUNING UP)

0509~512 2SC3327ABTP MUTING

D531,532 MA165TA D533~536 MA4030MTA

Q509 Q511 Q512 Q510

E471 CN601 CN601A HP601 HEADPHONES

E HEADPHONES JACK CIRCUIT

SA-GX350 SA-GX350

Power Source Circuit For (G) area.

H POWER SUPPLY CIRCUIT

Q651,652,654,655
2SA1309AQSTA
MOTOR DRIVE

R677 15K, C651 50V2.2, R678 15K, R679 10K, Q651, D652 MA4068MTA, D651 MA165TA, R680 22K, Q652, R681 3.3K, R682 1/2W39, Q653, R683 10K, R684 15K, C655 6.3V220, Q655, R689 22, Q654, R688 2.2K, R686 33K, R685 33K, D653 MA165TA, R687 10K, C652 16V10, JK651, M, FAN MOTOR

Q653
2SB621AQSTA
MOTOR DRIVE

W752

Q752
2SC3940AQSTA
REGULATOR

△Q752, C756 0.01, R754 1K, C757 16V47, C753 25V1000, D756 MA4068MTA, D755 MA165TA, RL751, D753 ISR35200TB, D754 ISR35200TB, T751, C752 0.01, D752 ISR35200TB, D751 ISR35200TB, Q751 47K 10K, C754 0.01

Q751
UN421FTA
SWITCHING

W701, CN753, CN754, CN755, CN756, CN757, CN758, CN759, CN760, CN761, T701, D771, D772, D771,772 ISR35200TB, C771 35V330, C772 35V330, D724, D723, D722, D721, C722 0.1, D721~724 P300DLF, F1 T3.15A, C751 0.01, F2 T1.6A, W7, W6, W8, W3, W4, W5, W1, W2, CN751, JK791, L, N, AC IN, (110-127V/220-240V 50/60Hz), 110-127V — 220-240V, S701 (VOLT ADJ.)

J AC IN CIRCUIT

I POWER TRANSFORMER CIRCUIT

F IN/OUT TERMINAL CIRCUIT

AUDIO

CD Lch, CD Rch, TAPE/DCC REC(OUT) Rch, TAPE/DCC PLAY(IN) Rch, VCR2 (IN) Rch, VCR1 OUT Rch, VCR1 IN Rch

JK402, JK403, JK404, R401 1K, R402 1K, R405 1K, R406 1K, R407 1K, R408 1K, R409 1K, R410 1K, R411 1K, R412 1K, R413 1K, R414 1K, C417 100P, C418 100P, C419 330P, C420 330P, C421 330P, C422 330P, C423 100P, C424 100P, C425 100P, C426 100P, C427 220P, C428 220P

REC OUT SIGNAL (Lch)

IC402
UPC4570C
BUFFER AMP

IC401
TC9163N
INPUT SELECTOR

R423 1K, C401 35V47, C403 0.01, R426 10K, R425 10K, C404 35V47, C402 0.01, R424 1K, R427 10K, C405 100P, DATA CLK, STB GND

IC402, C431 16V10, C413 16V10, C410 16V22, C421 1.0U, R421 100K, R417 47K, C409 16V22, C422 1.0U, R422 100K, R418 47K, R416 1K, C432 16V10, C414 16V10, R419 100K, C416 0.01, R420 100K, C415 0.01

E401, GND, JK401 PHONO Lch, PHONO Rch, R469 1K, C468 100P, R470 1K, C470 100P, JK406 REMOTE CONTROL OUT

CN401, CN401A, CN402, CN402A, CN1101A, GND, +B(4), +B(1)

G MAIN CIRCUIT (PHNO EQ/VIDEO SELECTOR/DOLBY PRO LOGIC/CENTER,REAR VOLUME/POWER AMP/REGULATOR)

VIDEO

JK407 VCR1 IN, JK407 VCR2 IN, VCR1 OUT, TV MONITOR OUT

R351 470, R362 47, R352 470, R359 47, R361 390, R358 390, R364 560, R365 3.3K, R363 3.3K, R356 1K, C351 6.3V100, D351 MA4068MTA, D353 MA165TA, C352 0.01, C353 6.3V47, R369 1/2W220, R935 47K, R370 1/2W220, R366 47K, C352 6.3V100, D352 MA4068MTA

Q353 5.4V 0.5V 0V, R360 47, Q352 5.4V 0.5V 0V, R357 47, Q351 0.5V 0V -5.9V, R355 47, R354 47K

0352,353
2SC3311AQSTA
VIDEO AMP

Q354
5.2V
UN4211TA
SWITCHING

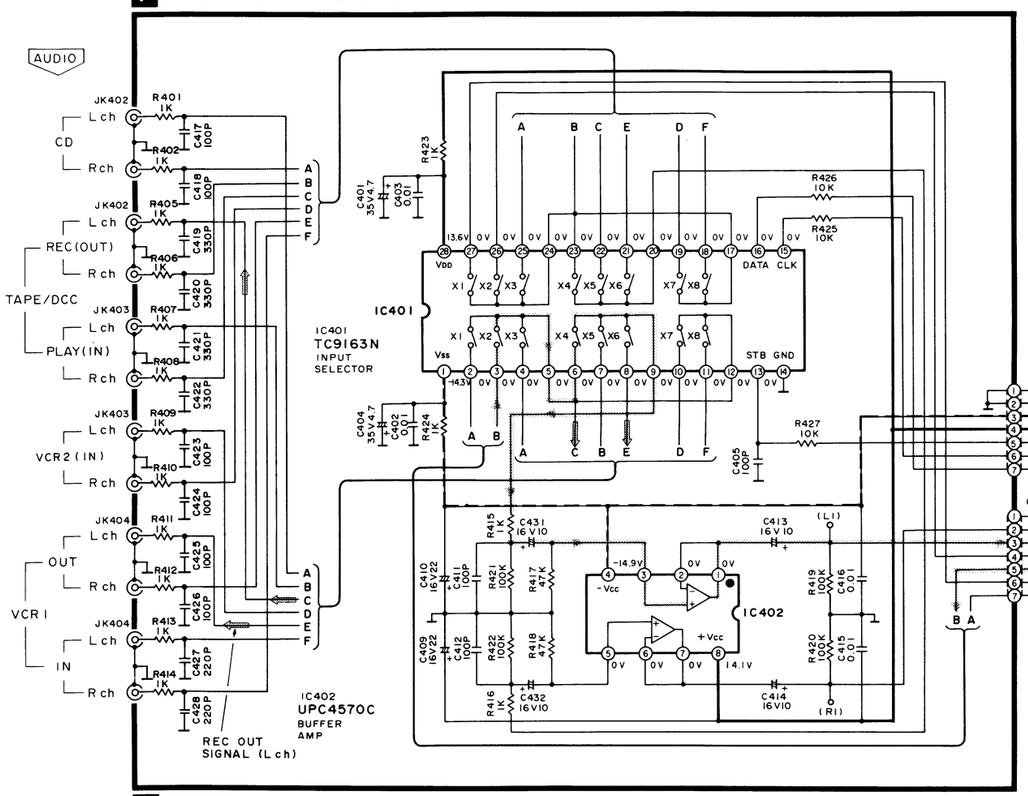
IC351
MC14052BCP
VIDEO SELECTOR

SW CONT, Vss GND

To A CIRCU On pag

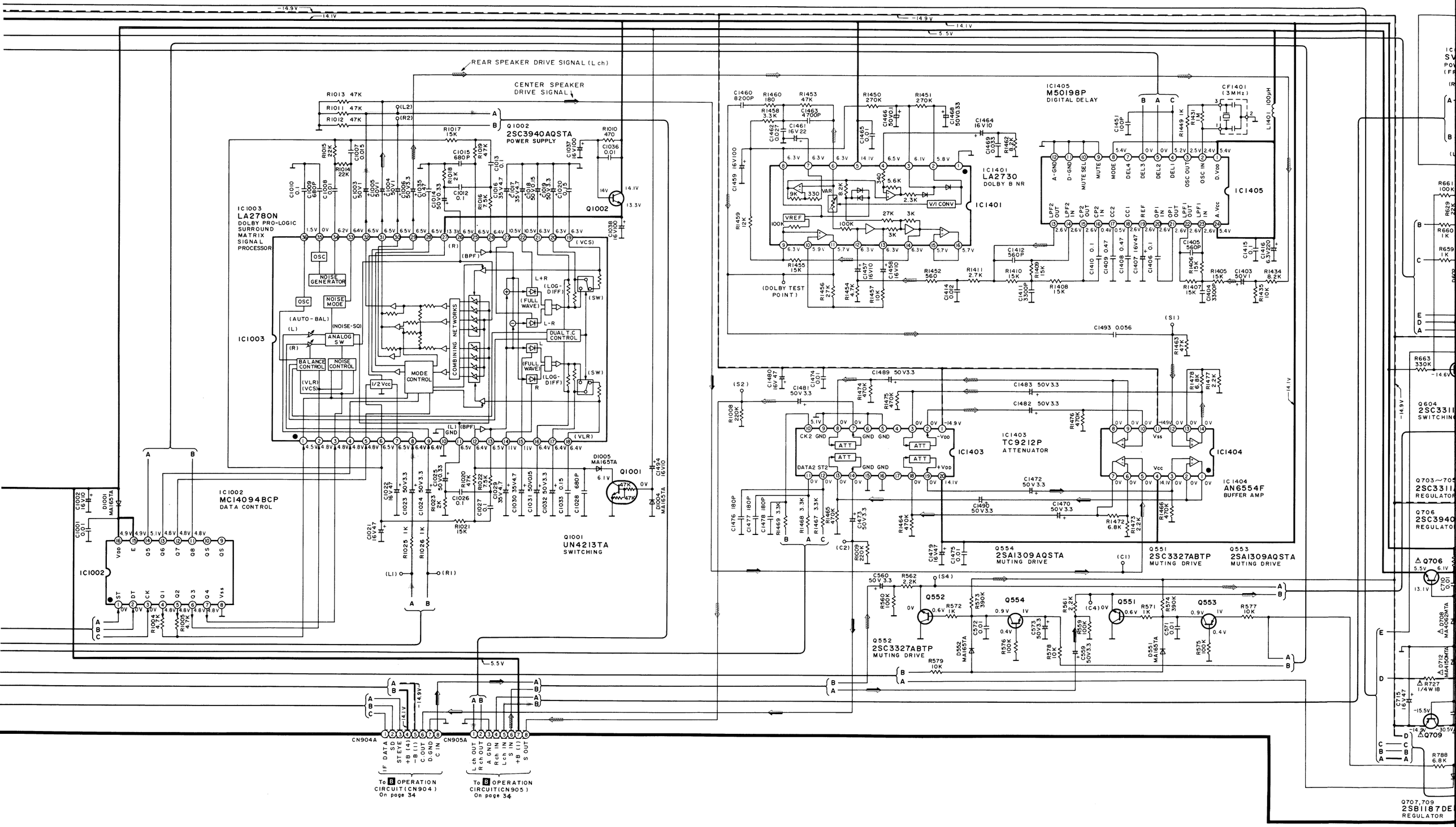
5 6 7 8 9 10 11 12 13 14

F IN/OUT TERMINAL CIRCUIT

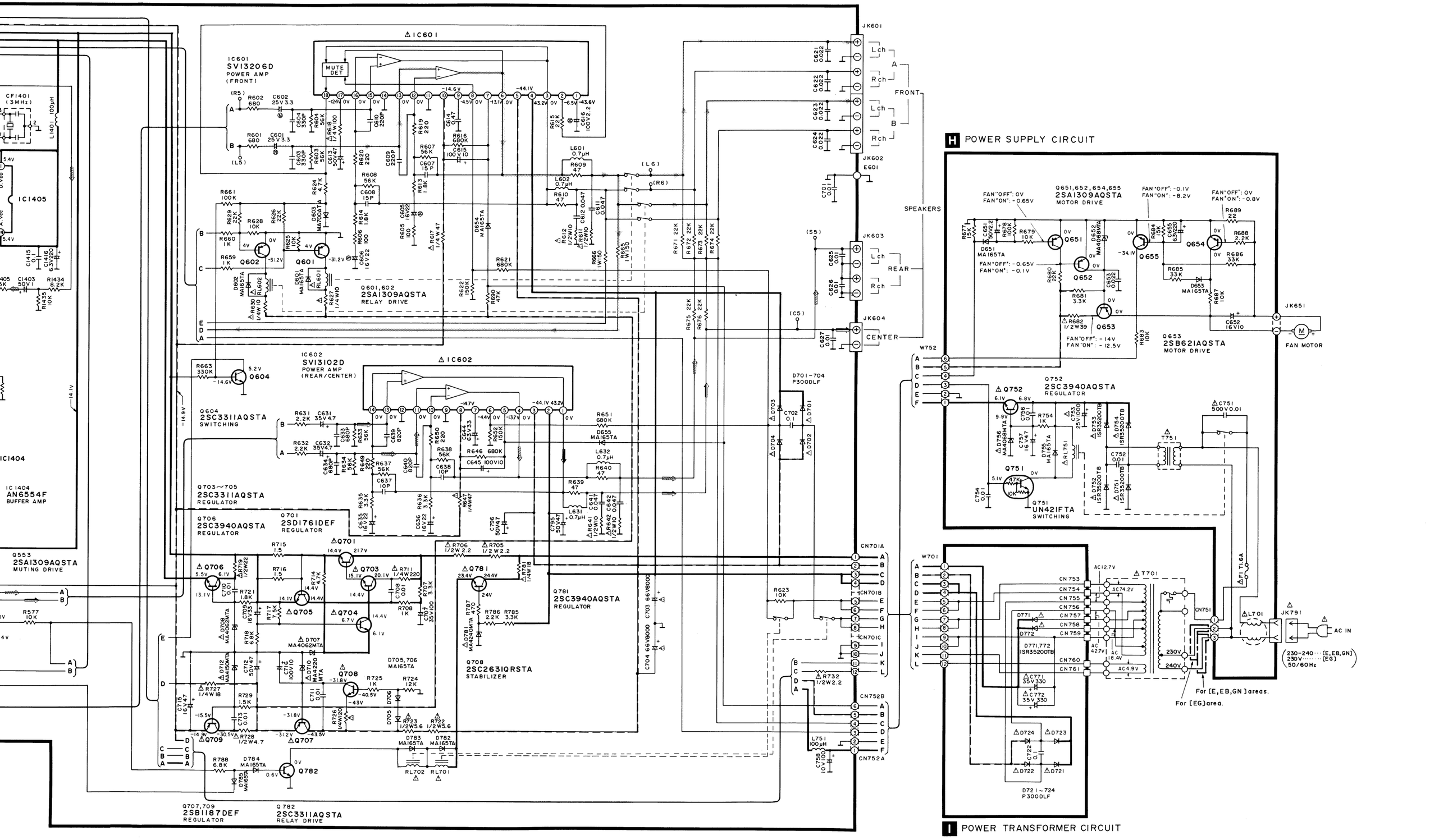


G MAIN CIRCUIT (PHNO EQ / VIDEO SELECTOR / DOLBY PRO LOGIC / CENTER, REAR VOLUME / POWER AMP / REGULATOR)

To A TUNER CIRCUIT(CN101) On page 30,32
To A TUNER CIRCUIT(CN102) On page 30,32
To B OPERATION CIRCUIT(CN902) On page 33
To B OPERATION CIRCUIT(CN903) On page 33
To B OPERATION CIRCUIT(CN901) On page 33

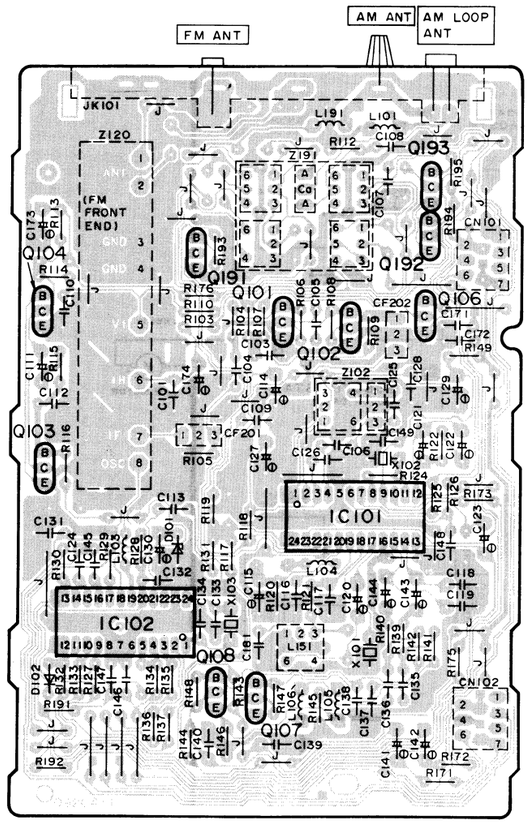

REAR SPEAKER DRIVE SIGNAL (L ch)
CENTER SPEAKER DRIVE SIGNAL
Q1002 2SC3940AQSTA POWER SUPPLY
IC1003 LA2780N DOLBY PRO-LOGIC SURROUND MATRIX SIGNAL PROCESSOR
IC1002 MC14094BCP DATA CONTROL
Q1001 UN4213TA SWITCHING
IC1401 LA2730 DOLBY B NR
IC1405 M50198P DIGITAL DELAY
IC1403 TC9212P ATTENUATOR
IC1404 AN6554F BUFFER AMP
Q552 2SC3327ABTP MUTING DRIVE
Q554 2SA1309AQSTA MUTING DRIVE
Q551 2SC3327ABTP MUTING DRIVE
Q553 2SA1309AQSTA MUTING DRIVE
Q604 2SC3311 SWITCHING
Q703~705 2SC3311 REGULATOR
Q706 2SC3940 REGULATOR
Q707,709 2SB1187DE REGULATOR
CN904A
CN905A
To B OPERATION CIRCUIT(CN904) On page 34
To B OPERATION CIRCUIT(CN905) On page 34

24 25 26 27 28 29 30 31 32 33

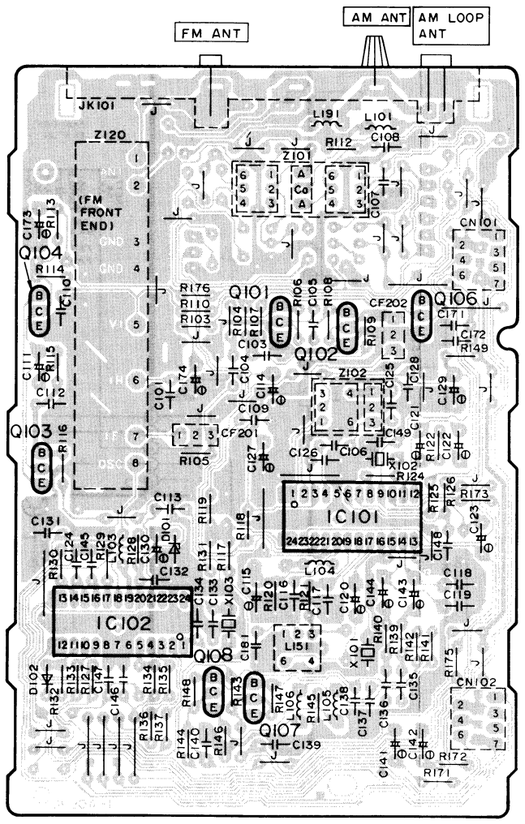


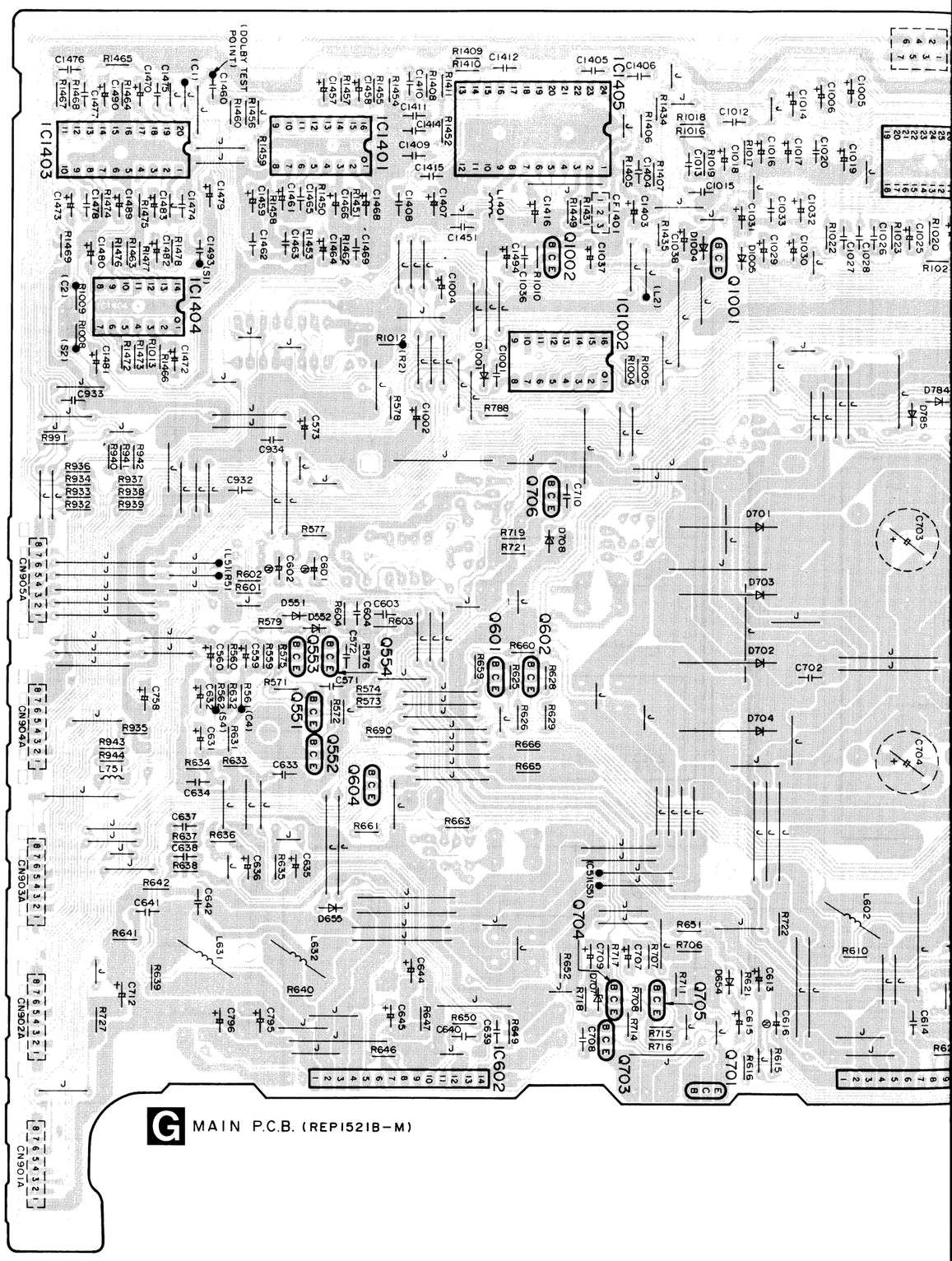
■ PRINTED CIRCUIT BOARDS

A TUNER P.C.B. For (E,EB,G,GN) areas.
(REP1452H-T)



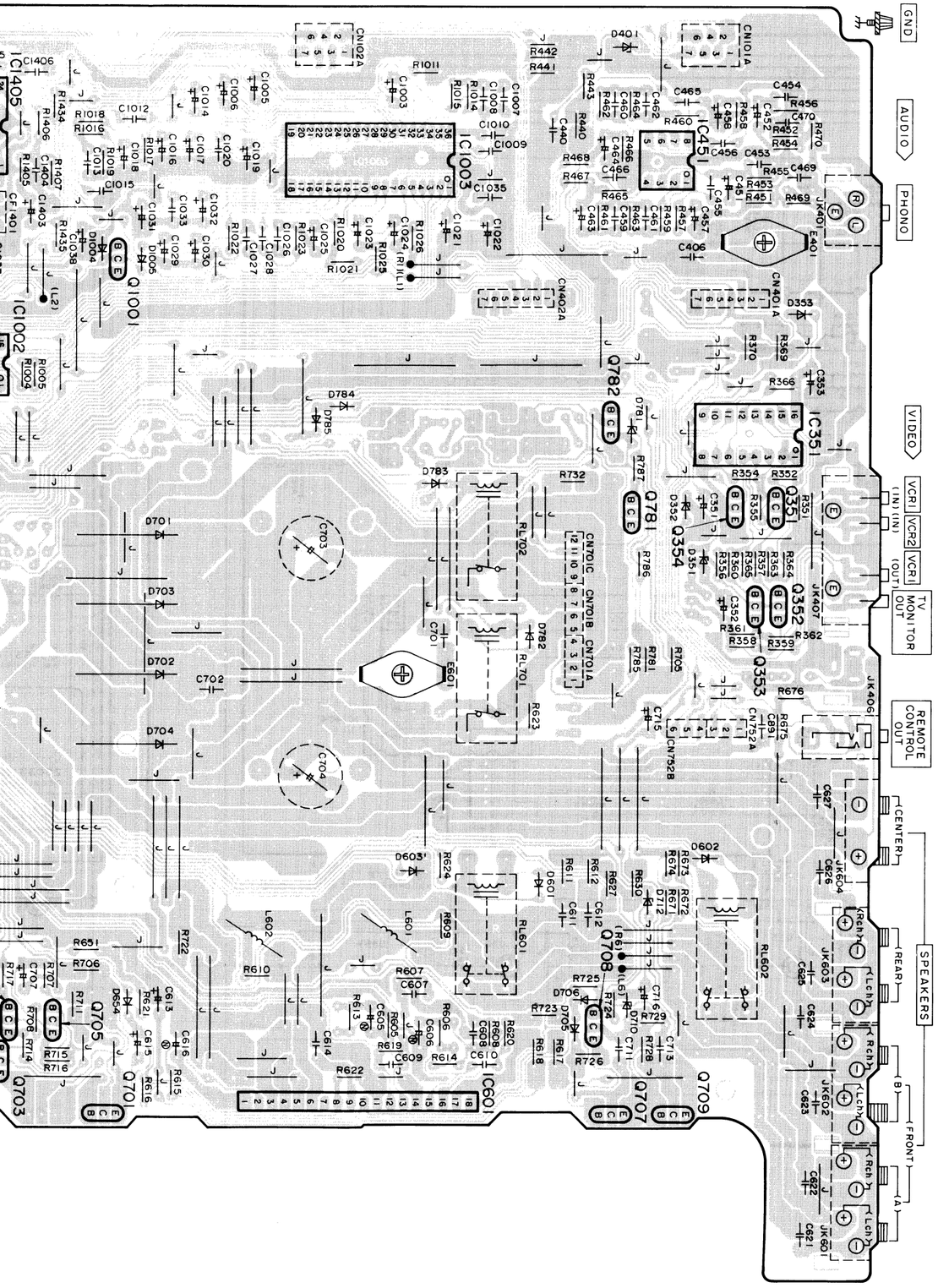
A TUNER P.C.B. For (EG) area.
(REP1452G-T)



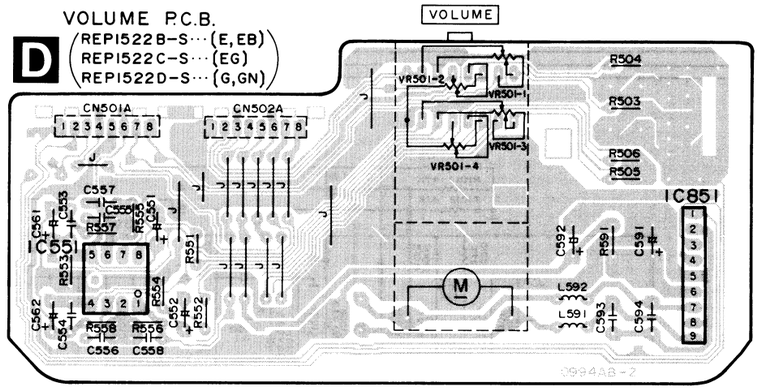


G MAIN P.C.B. (REP1521B-M)

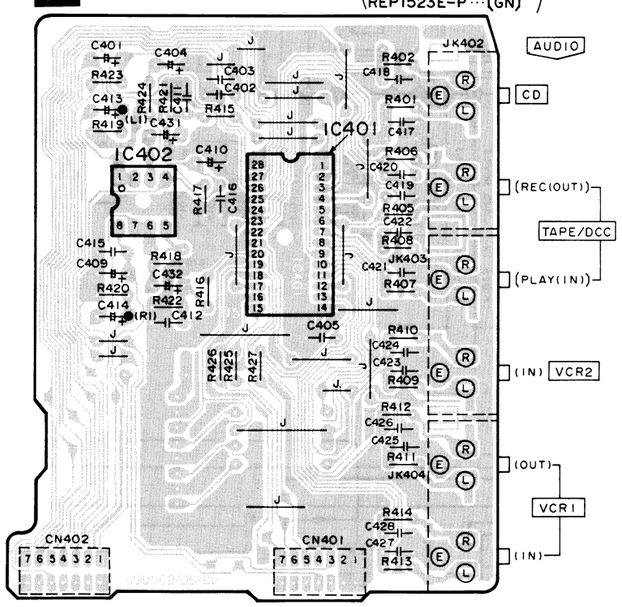
9 10 11 12 13 14 15 16 17 18 19



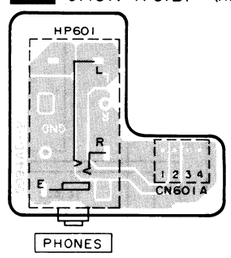
D VOLUME P.C.B. (REP1522B-S···(E,EB) REP1522C-S···(EG) REP1522D-S···(G,GN))



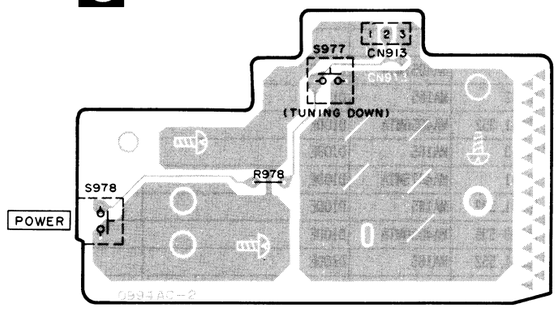
F IN/OUT TERMINAL P.C.B. (REP1523B-P···(E,EB) REP1523C-P···(EG) REP1523D-P···(G) REP1523E-P···(GN))



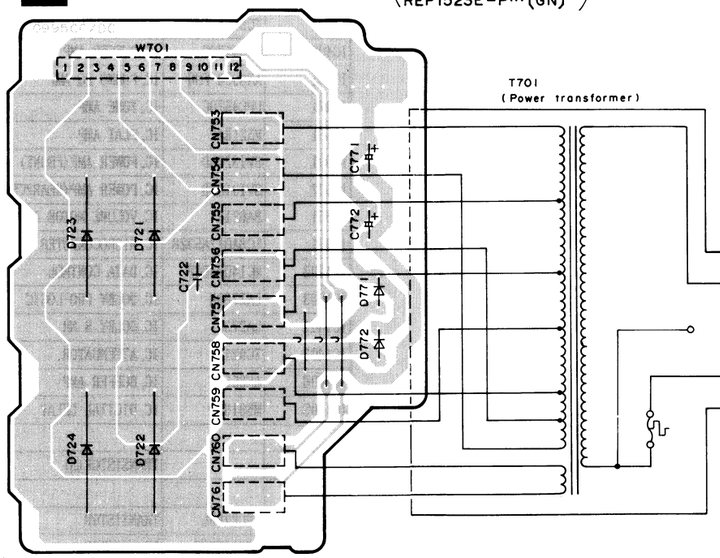
E HEADPHONES JACK P.C.B. (REP1522B-S···(E,EB) REP1522C-S···(EG) REP1522D-S···(G,GN))



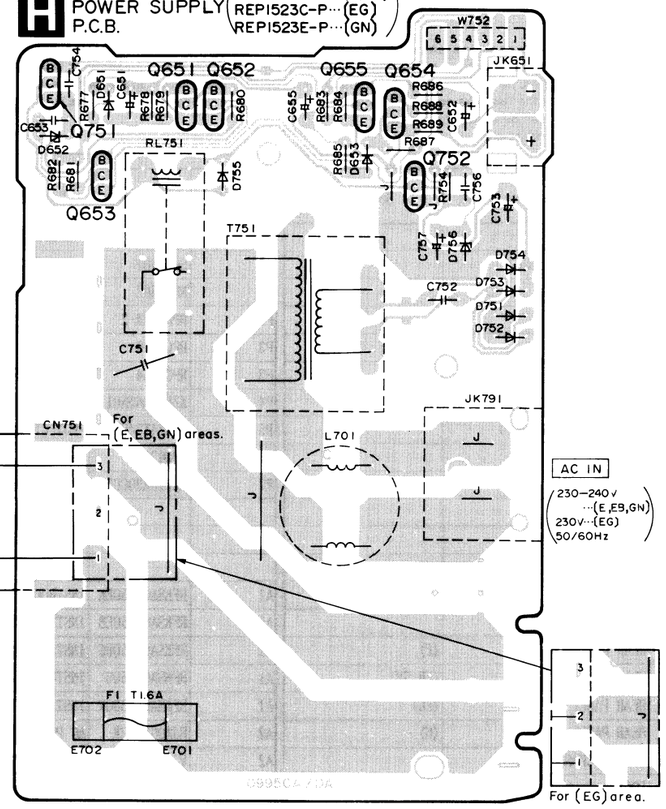
C POWER SWITCH P.C.B. (REP1522B-S···(E,EB) REP1522C-S···(EG) REP1522D-S···(G,GN))



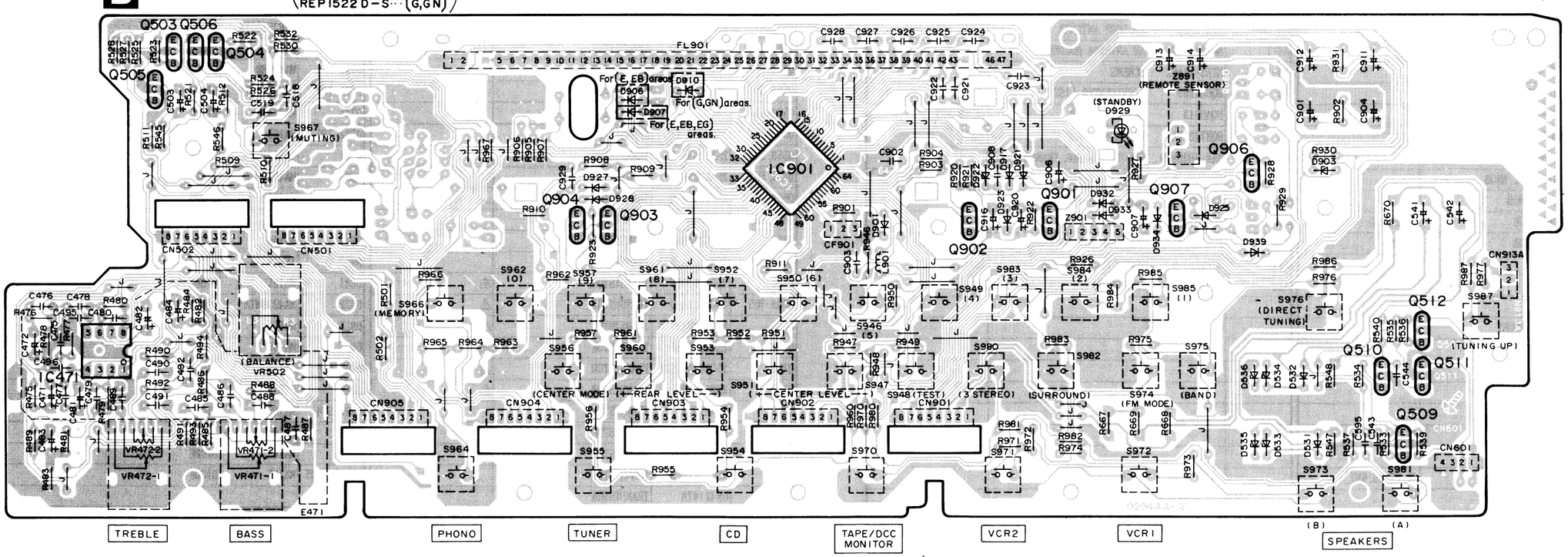
I POWER TRANSFORMER P.C.B. (REP1523B-P···(E,EB) REP1523C-P···(EG) REP1523E-P···(GN))



H POWER SUPPLY P.C.B. (REP1523B-P···(E,EB) REP1523C-P···(EG) REP1523E-P···(GN))

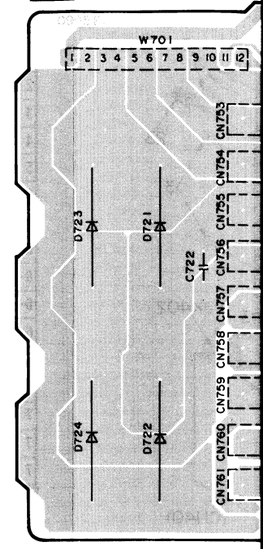


B OPERATION P.C.B. (REP1522B-S···(E,EB) REP1522C-S···(EG) REP1522D-S···(G,GN))



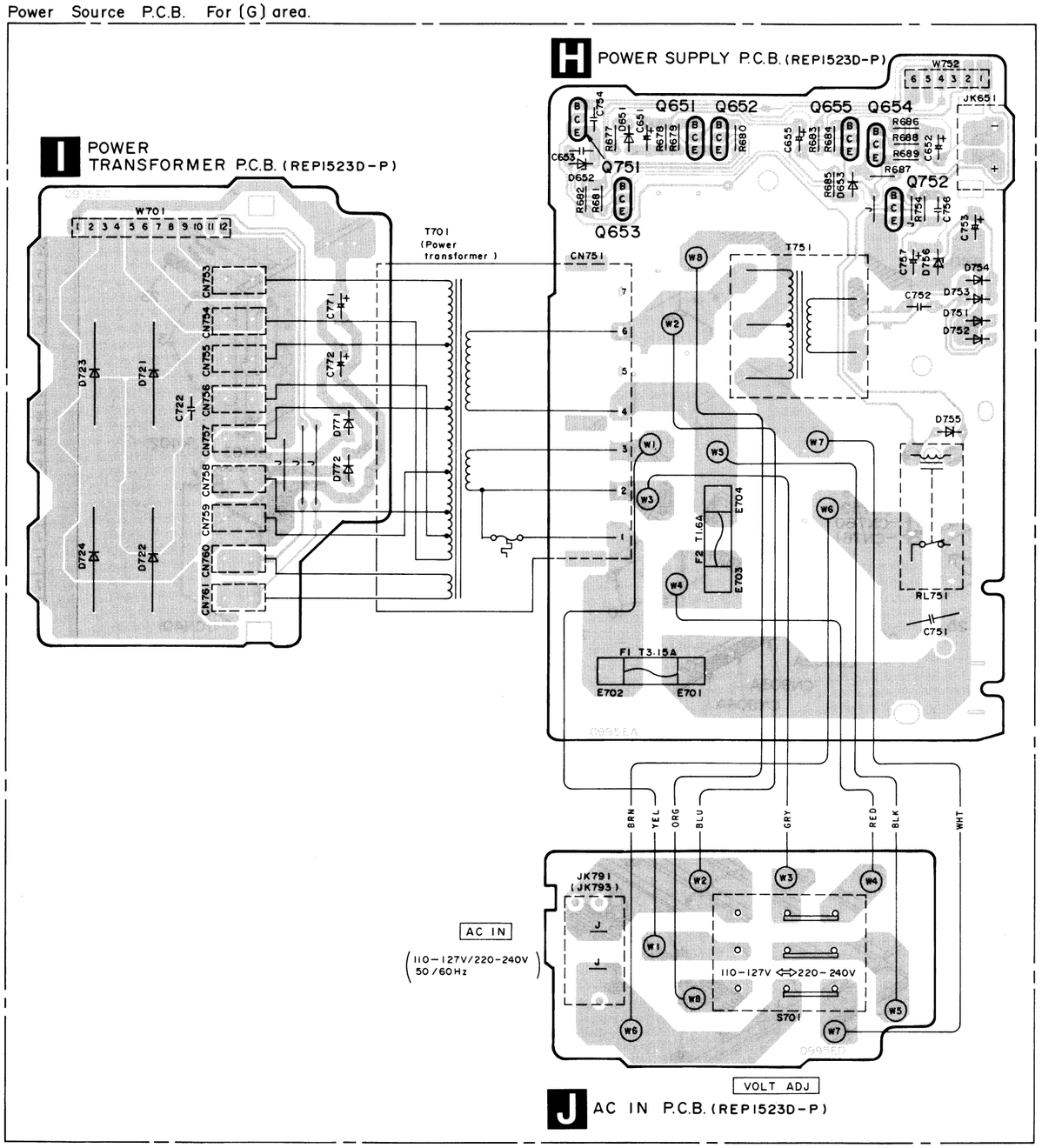
Power Source P.C.B. For (

I POWER TRANSFORMER P

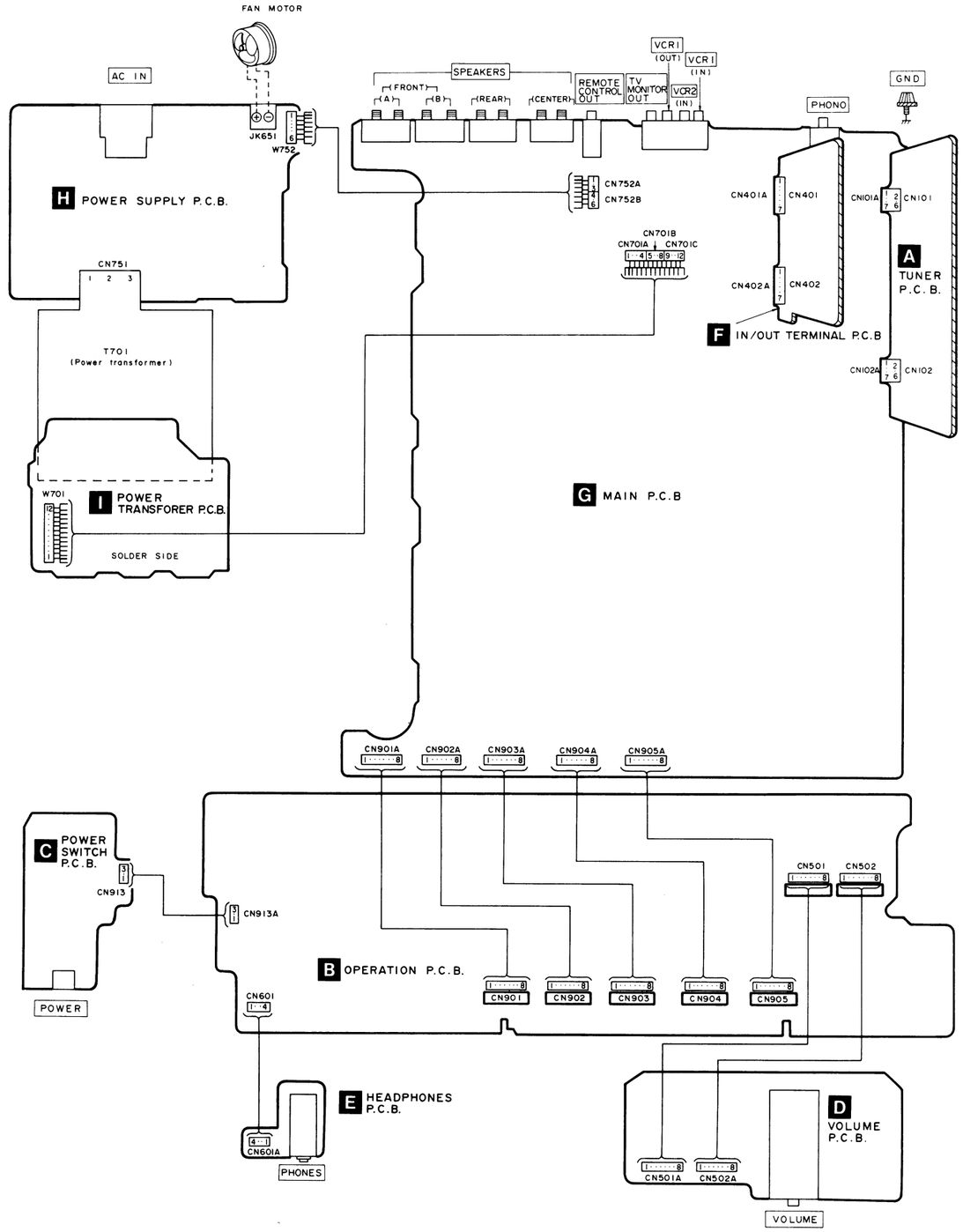


29 30 31 32 33 34

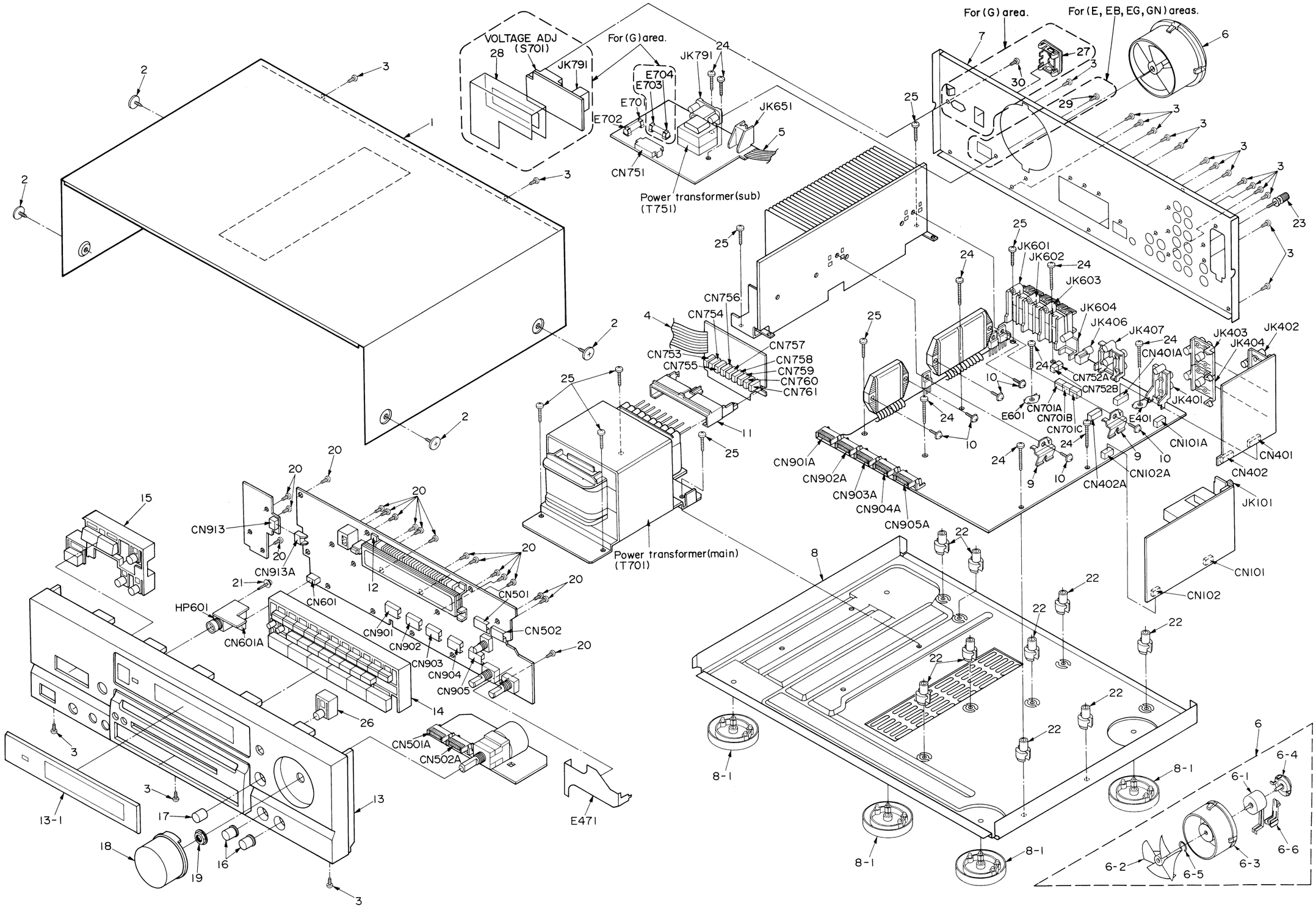
Power Source P.C.B. For (G) area.



■ WIRING CONNECTION DIAGRAM



■ CABINET PARTS LOCATION



■ REPLACEMENT PARTS LIST

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*The "(SF)" mark denotes the standard part.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKM0219A-K	CABINET	
2	SNE2129-3	SCREW	
3	XTBS3+8JFZ1	SCREW	
4	RWJ1812440QK	FLAT CABLE(W701) (12P)	
5	RWJ1806300QK	FLAT CABLE(W752) (6P)	
6	REM0020-1	FAN UNIT	
6-1	MDN-4RB4MRC	MOTOR	
6-2	SHE232-1	FAN	
6-3	RMQ0209-K	FAN CASE	
6-4	RMQ0208-K	FAN CAP	
6-5	SUS271	SPRING	
6-6	RMQ0212-K	FAN TERMINAL CAP	
7	RGR0161B-A	REAR PANEL	(E)
7	RGR0161B-B	REAR PANEL	(EB, GN)
7	RGR0161B-C	REAR PANEL	(EG)
7	RGR0161C-A	REAR PANEL	(G)
8	RFKJAGX350PK	BOTTOM CHASSIS ASS'Y	
8-1	RKA0053-A	FOOT	
9	RMC0158	TRANSISTOR HOLDER	
10	XTW3+15T	SCREW	
11	RMN0217-1	P. C. B HOLDER	
12	RMN0205	FL HOLDER	
13	RFKGAGX350E	FRONT PANEL ASS'Y	
13-1	RKW0252A-Q	TRANSPARENT PLATE	
14	RGU0837A-K	SELECTOR BUTTON	
15	RFKNAGX350PA	MODE BUTTON ASS'Y	
16	RGW0012-K1	BASS/TREBLE KNOB	
17	RGW0020	BALANCE KNOB	
18	RGW0163A-K	VOLUME KNOB	(E, EB, EG)
18	RGW0145-1K	VOLUME KNOB	(G, GN)
19	RHN90001	NUT	
20	XTBS26+8J	SCREW	
21	XTWS3+10T	SCREW	
22	SHE187-2	P. C. B. SUPPORT	
23	SNE2123	GND TERMINAL	
24	XTB3+20JFZ	SCREW	
25	XTB3+8JFZ	SCREW	
26	RFKNAGX350PB	MUTING BUTTON ASS'Y	
27	SJS9231A	AC INLET COVER	(G)
28	RMZ0243	BARRIER	(G)
29	XTBS3+8JFZ1	SCREW	(E, EB, EG, GN)
30	XTBS3+8JFZ1	SCREW	(G)
		PACKING MATERIAL	

Ref. No.	Part No.	Part Name & Description	Remarks
P1	RPG1601	PACKING CASE	(E, EG, G, GN)
P1	RPG1602	PACKING CASE	(EB)
P2	RPN0324-2	CUSHION	
P3	RPQ0370	PAD(ACCESSORIES)	(E, EG, G)
P3	RPQ0164	PAD(ACCESSORIES)	(EB, GN)
P4	XZB60X65A01Z	PROTECTION BAG(UNIT)	
P5	XZB24X34C04	PROTECTION BAG(ACCESSORIES)	
P6	RPQ0350	PAD	(EB, GN)
P7	XZB10X30C03	PROTECTION BAG(CORD)	(EB, GN)
		ACCESSORIES	
A1	RFKSAGX350EK	INSTRUCTION MANUAL ASS'Y	(E)
A1	RFKSAGX350EB	INSTRUCTION MANUAL ASS'Y	(EB)
A1	RFKSAGX350EG	INSTRUCTION MANUAL ASS'Y	(EG)
A1	RFKSAGX350G	INSTRUCTION MANUAL ASS'Y	(G)
A1	RFKSAGX350GN	INSTRUCTION MANUAL ASS'Y	(GN)
A2	RJA0019-2K	AC POWER SUPPLY CORD	(E, EG, G) ⚠ (SF)
A2	VJA0733	AC POWER SUPPLY CORD	(EB) ⚠ (SF)
A2	RJA0036-K	AC POWER SUPPLY CORD	(GN) ⚠ (SF)
A3	RSA0007	FM INDOOR ANTENNA	
A4	SPB1163T	AM LOOP ANTENNA	
A4-1	SMA233-1M	AM ANTENNA HOLDER	
A4-2	XTN3+10AFZ	SCREWS	
A5	RQCB0169	SERVICENTER LIST	
A6	RQA0013	WARRANTY CARD	(E, EB, EG)
A6	RQX7433ZA	WARRANTY CARD	(GN)
A7	RAK-SA009XH	REMOTE CONTROL TRANSMITTER	
A7-1	RKK0020-K	BATTERY COVER	FOR R/C TRANSMITTER
A8	SJP9009	ATTACHMENT PLUG	(EB) ⚠
A9	RFE0014	ANTENNA PLUG	(G, GN)
A10	RQLA0134	VOLTAGE CAUTION LABEL	(G)
A11	SJP5213-2	POWER PLUG ADAPTOR	(G) ⚠
A12	SQX40022	AM STEREO CAUTION LABEL	(GN)

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	LA1830-H3	IC, FM/AM IF AMP. /AM OSC	
IC102	LC7218	IC, PLL FREQ SYNTHESIZER	
IC351	MC14052BCP	IC, VIDEO SELECTOR	
IC401	TC9163N	IC, INPUT SELECTOR	
IC402	UPC4570C	IC, BUFFER AMP	
IC451	AN6558-FSG	IC, PHONO EQ AMP	
IC471	UPC4570C	IC, TONE AMP	
IC551	M5218AP	IC, FLAT AMP	
IC601	SVI3206D	IC, POWER AMP(FRONT)	⚠
IC602	SVI3102D	IC, POWER AMP(REAR/CENTER)	⚠
IC851	BA6218	IC, VOLUME MOTOR DRIVE	
IC901	LC8A012A5328	IC, MICROCOMPUTER	
IC1002	MC14094BCP	IC, DATA CONTROL	
IC1003	LA2780N	IC, DOLBY PRO-LOGIC	
IC1401	LA2730	IC, DOLBY B NR	
IC1403	TC9212P	IC, ATTENUATOR	
IC1404	AN6554F	IC, BUFFER AMP	
IC1405	M50198P	IC, DIGITAL DELAY	
		TRANSISTOR(S)	
Q101, 102	2SC2787L	TRANSISTOR	
Q103, 104	2SC2785FE	TRANSISTOR	
Q106	UN411FTA	TRANSISTOR	
Q107, 108	2SC3311A-Q	TRANSISTOR	
Q191-193	2SC3311A-Q	TRANSISTOR	(E, EB, G, GN)
Q351	2SA1309A-R	TRANSISTOR	
Q352, 353	2SC3311A-Q	TRANSISTOR	
Q354	UN4211	TRANSISTOR	
Q503-506	2SC3327-A	TRANSISTOR	
Q509-512	2SC3327-A	TRANSISTOR	
Q551, 552	2SC3327-A	TRANSISTOR	
Q553, 554	2SA1309A-R	TRANSISTOR	
Q601, 602	2SA1309A-R	TRANSISTOR	
Q604	2SC3311A-Q	TRANSISTOR	
Q651, 652	2SA1309A-R	TRANSISTOR	
Q653	2SB621AQSTA	TRANSISTOR	
Q654, 655	2SA1309A-R	TRANSISTOR	
Q701	2SD1761DEF	TRANSISTOR	⚠
Q703-705	2SC3311A-Q	TRANSISTOR	⚠
Q706	2SC3940AQSTA	TRANSISTOR	⚠
Q707	2SB1187DEF	TRANSISTOR	⚠
Q708	2SC2631QRSTA	TRANSISTOR	⚠
Q709	2SB1187DEF	TRANSISTOR	⚠
Q751	UN421FTA	TRANSISTOR	
Q752	2SC3940AQSTA	TRANSISTOR	⚠
Q781	2SC3940AQSTA	TRANSISTOR	⚠
Q782	2SC3311A-Q	TRANSISTOR	
Q901	UN4214TA	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
Q902	2SA1309A-R	TRANSISTOR	⚠
Q903	UN4113TA	TRANSISTOR	
Q904	UN4214TA	TRANSISTOR	
Q906	2SA1309A-R	TRANSISTOR	
Q907	UN4113TA	TRANSISTOR	
Q1001	UN4213	TRANSISTOR	
Q1002	2SC3940AQSTA	TRANSISTOR	
		DIODE(S)	
D101	MA4051MTA	DIODE	⚠
D102	MA165	DIODE	
D351, 352	MA4056MTA	DIODE	⚠
D353	MA165	DIODE	
D401	MA4075MTA	DIODE	⚠
D531, 532	MA165	DIODE	
D533-536	MA4030MTA	DIODE	
D551, 552	MA165	DIODE	
D601, 602	MA165	DIODE	
D603	MA700	DIODE	
D651	MA165	DIODE	
D652	MA4068M	DIODE	
D653-655	MA165	DIODE	
D701-704	P300DLF	DIODE	⚠
D705, 706	MA165	DIODE	
D707, 708	MA4062MTA	DIODE	⚠
D710	MA4220MTA	DIODE	⚠
D712	MA4150M	DIODE	⚠
D721-724	P300DLF	DIODE	⚠
D751-754	1SR35200TB	DIODE	⚠
D755	MA165	DIODE	
D756	MA4068M	DIODE	⚠
D771, 772	1SR35200TB	DIODE	⚠
D781	MA4240H	DIODE	⚠
D782-785	MA165	DIODE	
D901	1SS291TA	DIODE	
D903	MA4056MTA	DIODE	⚠
D906	MA165	DIODE	(E, EB)
D907	MA165	DIODE	(E, EB, EG)
D910	MA165	DIODE	(G, GN)
D917	1SS291TA	DIODE	
D921	MA165	DIODE	
D922	MA4039MTA	DIODE	⚠
D923	MA165	DIODE	
D925	MA165	DIODE	
D927, 928	MA165	DIODE	
D929	LN018304P	LED	
D932-934	MA165	DIODE	
D939	MA165	DIODE	
D1001	MA165	DIODE	
D1004, 1005	MA165	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)	
VR471, 472	EVJYA1FA5C15	V. R, TONE CONTROL	
VR501	RRV24D01A	V. R, VOLUME CONTROL	
VR502	EVJ02QF02G15	V. R.-BALANCE CONTROL	
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	(EG)
Z102	RL12Z006M-T	COMPONENT COMBINATION	
Z120	ENV17290G1	COMPONENT COMBINATION	
Z191	RLA6Z005M-T	COMPONENT COMBINATION	(E, EB, G, GN)
Z891	RCDHC-278	REMOTE SENSOR	
Z901	EXBF5E104J	COMPONENT COMBINATION	
		COIL(S)	
L101	ELESN1R0MA	COIL	(E, EB, G, GN)
L101	ELESNR56MA	COIL	(EG)
L103	ELEXTR47MA9	COIL	
L104	ELEXT100KA9	COIL	
L105, 106	RLQZB822KT-D	COIL	
L151	SLM1B10M-1M	COIL	
L191	ELESN1R0MA	COIL	(E, EB, G, GN)
L191	ELESNR56MA	COIL	(EG)
L591, 592	RLQZP1R0KT-Y	COIL	
L601, 602	SLQY07G-40	COIL	
L631, 632	SLQY07G-40	COIL	
L701	SLQZ650MH49	COIL	(E, EB, EG, GN) ⚠
L751	ELEPK101KA	COIL	
L901	RLQZP101KT-Y	COIL	
L1401	ELEPK101KA	COIL	
		TRANSFORMER(S)	
T701	RTP1P5E008-W	POWER TRANSFORMER(MAIN)	(E, EB, EG, GN) ⚠
T701	RTP1P5E009-W	POWER TRANSFORMER(MAIN)	(G) ⚠
T751	RTP115E003-V	POWER TRANSFORMER(SUB)	(E, EB, EG, GN) ⚠
T751	RTP115E005-V	POWER TRANSFORMER(SUB)	(G) ⚠
		FILTER(S)	
CF201	RLFFETNGD01L	FILTER	
CF202	RLFFETMGD01L	FILTER	
CF901	EF0EC6004T4	OSCILLATOR(6MHz)	
CF1401	EF0GC3004T4	OSCILLATOR(3MHz)	
X101	RSXZ456KM07M	OSCILLATOR(456KHz)	
X102	RLFDFTD03M1	OSCILLATOR(10. 7MHz)	
X103	SVQ49U722-S	OSCILLATOR(7. 2MHz)	
		DISPLAY TUBE(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
FL901	RSL0138-F	DISPLAY TUBE	
		FUSE(S)	
F1	XBA2C16TB0	FUSE, 250V 1. 6A	(E, EB, EG, GN) ⚠
F1	XBA2C31TB0	FUSE, 250V 3. 15A	(G) ⚠
F2	XBA2C16TB0	FUSE, 250V 1. 6A	(G) ⚠
		SWITCH(ES)	
S701	ESD26840A	SW, VOLTAGE ADJ.	(G) ⚠
S946	EVQ21405R	SW, PRESET TUNING 5	
S947	EVQ21405R	SW, CENTER LEVEL-	
S948	EVQ21405R	SW, TEST	
S949	EVQ21405R	SW, PRESET TUNING 4	
S950	EVQ21405R	SW, PRESET TUNING 6	
S951	EVQ21405R	SW, CENTER LEVEL+	
S952	EVQ21405R	SW, PRESET TUNING 7	
S953	EVQ21405R	SW, REAR LEVEL-	
S954	EVQ21405R	SW, CD	
S955	EVQ21405R	SW, TUNER	
S956	EVQ21405R	SW, CENTER MODE	
S957	EVQ21405R	SW, PRESET TUNING 9	
S960	EVQ21405R	SW, REAR LEVEL+	
S961	EVQ21405R	SW, PRESET TUNING 8	
S962	EVQ21405R	SW, PRESET TUNING 0	
S964	EVQ21405R	SW, PHONO	
S966	EVQ21405R	SW, MEMORY	
S967	EVQ21405R	SW, MUTING	
S970	EVQ21405R	SW, TAPE/DCC MONI	
S971	EVQ21405R	SW, VCR2	
S972	EVQ21405R	SW, VCR1	
S973	EVQ21405R	SW, SPEAKER-B	
S974	EVQ21405R	SW, FM MODE	
S975	EVQ21405R	SW, BAND	
S976	EVQ21405R	SW, DIRECT TUNING	
S977	EVQ21405R	SW, TUNING DOWN	
S978	EVQ21405R	SW, POWER	
S980	EVQ21405R	SW, 3 STEREO	
S981	EVQ21405R	SW, SPEAKER-A	
S982	EVQ21405R	SW, SURROUND	
S983	EVQ21405R	SW, PRESET TUNING 3	
S984	EVQ21405R	SW, PRESET TUNING 2	
S985	EVQ21405R	SW, PRESET TUNING 1	
S987	EVQ21405R	SW, TUNING UP	
		JACK(S)	
JK101	RJH4202M	ANT TERMINAL	
JK401	SJF3068N	PHONO TERMINAL	
JK402	SJF3069N	CD IN/REC OUT TERMINAL	
JK403	SJF3069N	PLAY IN/VCR2 IN TERMINAL	

Ref. No.	Part No.	Part Name & Description	Remarks
JK404	SJF3069N	VCR1 OUT/VCR1 IN TERMINAL	
JK406	RJJ33TR01	REMOTE CONTROL OUT TERMINAL	
JK407	SJF3069-3N	TV MONITOR OUT/VCR1, 2	
JK601	RJR0054	FRONT SPEAKER(A) TERMINAL	
JK602	RJR0054	FRONT SPEAKER(B) TERMINAL	
JK603	RJR0054	REAR SPEAKER TERMINAL	
JK604	SJF5201M-1	CENTER SPEAKER TERMINAL	
JK651	RJS1A7402-1	FAN JACK	
JK791	SJS9236	AC INLET	(E, EB, EG) ⚠
JK791	SJS9231-1B	AC INLET	(G) ⚠
JK791	SJSD16	AC INLET	(GN) ⚠
HP601	RJJ63TS01	HEADPHONES JACK	
		CONNECTOR(S) AND SOCKET(S)	
CN101, 102	RJU063W07T	SOCKET(7P)	
CN401, 402	RJU057W007	SOCKET(7P)	
CN501, 502	RJT003K008M1	CONNECTOR(8P)	
CN601	RJT057W004-1	CONNECTOR(4P)	
CN751	SJS305-1	CONNECTOR(3P)	(E, EB, EG, GN)
CN751	SJS702-1	CONNECTOR(7P)	(G)
CN753-761	RJS1A1101T1	CONNECTOR(1P)	
CN901-905	RJT003K008M1	CONNECTOR(8P)	
CN913	SJT30345JQ	CONNECTOR(3P)	
CN101A	RJT063W07T	CONNECTOR(7P)	
CN102A	RJT063W07T	CONNECTOR(7P)	
CN401A	RJT057W007-1	CONNECTOR(7P)	
CN402A	RJT057W007-1	CONNECTOR(7P)	
CN501A	RJU003K008M1	SOCKET(8P)	
CN502A	RJU003K008M1	SOCKET(8P)	
CN601A	RJU057W004	SOCKET(4P)	
CN701A	RJS1A1704	SOCKET(4P)	
CN752A	RJS1A1703	CONNECTOR(3P)	
CN901A	RJU003K008M1	SOCKET(8P)	
CN902A	RJU003K008M1	SOCKET(8P)	
CN903A	RJU003K008M1	SOCKET(8P)	
CN904A	RJU003K008M1	SOCKET(8P)	
CN905A	RJU003K008M1	SOCKET(8P)	
CN913A	SJS50382JQH	SOCKET(3P)	
CN701B	RJS1A1704	SOCKET(4P)	
CN752B	RJS1A1703	CONNECTOR(3P)	
CN701C	RJS1A1704	SOCKET(4P)	
		GND PLATE(S)	
E401	SNE1004-1	GND PLATE	
E471	RSC0319	GND PLATE	
E601	SNE1004-1	GND PLATE	
E701, 702	EYF52BC	FUSE HOLDER	
E703, 704	EYF52BC	FUSE HOLDER	(G)
		RELAY(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
RL601, 602	RSY0013M-0	RELAY	⚠
RL701, 702	RSY0012M-0	RELAY	⚠
RL751	RSY0012M-0	RELAY	⚠

■ RESISTORS AND CAPACITORS

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P = Pico-farads (pF) F = Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1 K = 1,000 (OHM), 1 M = 1,000 k (OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R103	ERDS2TJ101	1/4W 100
R104	ERDS2TJ472	1/4W 4.7K
R105	ERDS2TJ391	1/4W 390
R106	ERDS2TJ474	1/4W 470K
R107	ERDS2TJ331	1/4W 330
R108	ERDS2TJ474	1/4W 470K
R109	ERDS2TJ331	1/4W 330
R110	ERDS2TJ102	1/4W 1K
R112	ERDS2TJ104	1/4W 100K
R113	ERDS2TJ103	1/4W 10K
R114	ERDS2TJ562	1/4W 5.6K
R115	ERDS2TJ561	1/4W 560
R116	ERDS2TJ102	1/4W 1K
R117	ERDS2TJ682T	1/4W 6.8K
R118	ERDS2TJ562	1/4W 5.6K
R119	ERDS2TJ822	1/4W 8.2K
R120	ERDS2TJ473	1/4W 47K
R121	ERDS2TJ242	1/4W 2.4K
R122	ERDS2TJ272T	1/4W 2.7K
R124	ERDS2TJ391	1/4W 390
R125, 126	ERDS2TJ472	1/4W 4.7K
R127	ERDS2TJ103	1/4W 10K
R128	ERDS2TJ820	1/4W 82
R129	ERDS2TJ473	1/4W 47K
R130, 131	ERDS2TJ102	1/4W 1K
R132	ERDS2TJ103	1/4W 10K
R133-137	ERDS2TJ102	1/4W 1K
R139, 140	ERDS2TJ272T	1/4W 2.7K
R141, 142	ERDS2TJ102	1/4W 1K
R143, 144	ERDS2TJ222	1/4W 2.2K
R145, 146	ERDS2TJ821	1/4W 820
R147, 148	ERDS2TJ474	1/4W 470K
R149	ERDS2TJ680T	1/4W 68
R171, 172	ERDS2TJ102	1/4W 1K
R173	ERDS2TJ471	1/4W 470
R175	ERDS2TJ102	1/4W 1K
R176	ERDS2TJ391	1/4W 390
R191	ERDS2TJ103	1/4W 10K E, EB, G, GN
R192	ERDS2TJ122	1/4W 1.2K E, EB, G, GN
R193	ERDS2TJ182	1/4W 1.8K E, EB, G, GN
R194	ERDS2TJ122	1/4W 1.2K E, EB, G, GN
R195	ERDS2TJ223	1/4W 22K E, EB, G, GN
R351, 352	ERDS2TJ471	1/4W 470
R354	ERDS2TJ472	1/4W 4.7K
R355	ERDS2TJ470	1/4W 47
R356	ERDS2TJ102	1/4W 1K

Ref. No.	Part No.	Values & Remarks
R357	ERDS2TJ470	1/4W 47
R358	ERDS2TJ391	1/4W 390
R359, 360	ERDS2TJ470	1/4W 47
R361	ERDS2TJ391	1/4W 390
R362	ERDS2TJ470	1/4W 47
R363	ERDS2TJ332	1/4W 3.3K
R364	ERDS2TJ561	1/4W 560
R365	ERDS2TJ332	1/4W 3.3K
R366	ERDS2TJ473	1/4W 47K
R369, 370	ERDS1FVJ221T	1/2W 220 ⚠
R401, 402	ERDS2TJ102	1/4W 1K
R405-416	ERDS2TJ102	1/4W 1K
R417, 418	ERDS2TJ473	1/4W 47K
R419-422	ERDS2TJ104	1/4W 100K
R423, 424	ERDS2TJ102	1/4W 1K
R425-427	ERDS2TJ103	1/4W 10K
R440	ERDS1FVJ820T	1/2W 82 ⚠
R441, 442	ERDS2TJ473	1/4W 47K
R443	ERDS2TJ330	1/4W 33
R451, 452	ERDS2TJ224T	1/4W 220K
R453, 454	ERDS2TJ391	1/4W 390
R455, 456	ERDS2TJ563	1/4W 56K
R457, 458	ERDS2TJ271	1/4W 270
R459, 460	ERDS2TJ680T	1/4W 68
R461, 462	ERDS2TJ184T	1/4W 180K
R463, 464	ERDS2TJ123	1/4W 12K
R465, 466	ERDS2TJ563	1/4W 56K
R467-470	ERDS2TJ102	1/4W 1K
R475, 476	ERDS2TJ471	1/4W 470
R477-480	ERDS2TJ474	1/4W 470K
R481, 482	ERDS2TJ222	1/4W 2.2K
R483, 484	ERDS2TJ392T	1/4W 3.9K
R485, 486	ERDS2TJ223	1/4W 22K
R487, 488	ERDS2TJ392T	1/4W 3.9K
R489, 490	ERDS2TJ222	1/4W 2.2K
R491, 492	ERDS2TJ122	1/4W 1.2K
R493, 494	ERDS2TJ333	1/4W 33K
R501, 502	ERDS2TJ222	1/4W 2.2K
R503-506	ERDS2TJ103	1/4W 10K
R509, 510	ERDS2TJ222	1/4W 2.2K
R511, 512	ERDS2TJ152	1/4W 1.5K
R521, 522	ERDS2TJ101	1/4W 100
R523-526	ERDS2TJ102	1/4W 1K
R527, 528	ERDS2TJ394	1/4W 390K
R530	ERDS2TJ103	1/4W 10K
R532	ERDS2TJ103	1/4W 10K
R533-536	ERDS2TJ102	1/4W 1K
R537	ERDS2TJ332	1/4W 3.3K
R539, 540	ERDS2TJ330	1/4W 33

Ref. No.	Part No.	Values & Remarks
R545, 546	ERDS2TJ122	1/4W 1.2K
R547, 548	ERDS1FVJ271T	1/2W 270 ⚠
R551, 552	ERDS2TJ222	1/4W 2.2K
R553, 554	ERDS2TJ104	1/4W 100K
R555	ERDS2TJ562	1/4W 5.6K
R556	ERDS2TJ822	1/4W 8.2K
R557, 558	ERDS2TJ102	1/4W 1K
R559, 560	ERDS2TJ104	1/4W 100K
R561, 562	ERDS2TJ222	1/4W 2.2K
R571, 572	ERDS2TJ102	1/4W 1K
R573, 574	ERDS2TJ394	1/4W 390K
R575, 576	ERDS2TJ104	1/4W 100K
R577-579	ERDS2TJ103	1/4W 10K
R591	ERDS1FVJ2R2T	1/2W 2.2 ⚠
R601, 602	ERDS2TJ681	1/4W 680
R603, 604	ERDS2TJ563	1/4W 56K
R605, 606	ERDS2TJ101	1/4W 100
R607, 608	ERDS2TJ563	1/4W 56K
R609, 610	ERDS2TJ470	1/4W 47
R611, 612	ERDS1FVJ100T	1/2W 10 ⚠
R613, 614	ERDS2TJ182	1/4W 1.8K
R615	ERDS2TJ223	1/4W 22K
R616	ERDS2TJ684	1/4W 680K
R617	ERD2FCVG470T	1/4W 47 ⚠
R618	ERD25FJ101	1/4W 100 ⚠
R619, 620	ERDS2TJ221	1/4W 220
R621	ERDS2TJ684	1/4W 680K
R622	ERDS2TJ154	1/4W 150K
R623	ERDS2TJ103	1/4W 10K
R624	ERDS2TJ472	1/4W 4.7K
R625	ERDS2TJ103	1/4W 10K
R626	ERDS2TJ223	1/4W 22K
R627	ERD25FVJ100T	1/4W 10 ⚠
R628	ERDS2TJ103	1/4W 10K
R629	ERDS2TJ223	1/4W 22K
R630	ERD25FVJ100T	1/4W 10 ⚠
R631, 632	ERDS2TJ222	1/4W 2.2K
R633, 634	ERDS2TJ563	1/4W 56K
R635, 636	ERDS2TJ332	1/4W 3.3K
R637, 638	ERDS2TJ563	1/4W 56K
R639, 640	ERDS2TJ470	1/4W 47
R641, 642	ERDS1FVJ100T	1/2W 10 ⚠
R646	ERDS2TJ684	1/4W 680K
R647	ERD25FJ470	1/4W 47 ⚠
R649, 650	ERDS2TJ221	1/4W 220
R651	ERDS2TJ684	1/4W 680K
R652	ERDS2TJ154	1/4W 150K
R659, 660	ERDS2TJ102	1/4W 1K
R661	ERDS2TJ104	1/4W 100K

Ref. No.	Part No.	Values & Remarks
R663	ERDS2TJ334	1/4W 330K
R665, 666	ERG1SJ151E	1W 150
R667-670	ERDS1FVJ680T	1/2W 68 ⚠
R671-676	ERDS2TJ223	1/4W 22K
R677	ERDS2TJ153	1/4W 15K
R678	ERDS2TJ104	1/4W 100K
R679	ERDS2TJ103	1/4W 10K
R680	ERDS2TJ223	1/4W 22K
R681	ERDS2TJ332	1/4W 3.3K
R682	ERDS1FVJ390T	1/2W 39 ⚠
R683	ERDS2TJ103	1/4W 10K
R684	ERDS2TJ153	1/4W 15K
R685, 686	ERDS2TJ333	1/4W 33K
R687	ERDS2TJ103	1/4W 10K
R688	ERDS2TJ222	1/4W 2.2K
R689	ERDS2TJ220T	1/4W 22
R690	ERDS2TJ473	1/4W 47K
R705, 706	ERDS1FVJ2R2T	1/2W 2.2 ⚠
R707	ERDS2TJ332	1/4W 3.3K
R708	ERDS2TJ102	1/4W 1K
R711	ERD25FVJ221T	1/4W 220 ⚠
R714	ERDS2TJ472	1/4W 4.7K
R715, 716	ERDS2TJ1R5T	1/4W 1.5
R717	ERDS2TJ752T	1/4W 7.5K
R718	ERDS2TJ682T	1/4W 6.8K
R719	ERDS1FVJ220T	1/2W 22 ⚠
R721	ERDS2TJ182	1/4W 1.8K
R722, 723	ERDS1FVJ5R6T	1/2W 5.6 ⚠
R724	ERDS2TJ123	1/4W 12K
R725	ERDS2TJ102	1/4W 1K
R726	ERD25FVJ121T	1/4W 120 ⚠
R727	ERD25FVJ180T	1/4W 18 ⚠
R728	ERDS1FVJ4R7T	1/2W 4.7 ⚠
R729	ERDS2TJ152	1/4W 1.5K
R732	ERDS1FVJ2R2T	1/2W 2.2 ⚠
R754	ERDS2TJ102	1/4W 1K
R781	ERD25FVJ180T	1/4W 18 ⚠
R785	ERDS2TJ332	1/4W 3.3K
R786	ERDS2TJ222	1/4W 2.2K
R787	ERDS2TJ471	1/4W 470
R788	ERDS2TJ682T	1/4W 6.8K
R901	ERDS2TJ102	1/4W 1K
R902	ERDS2TJ681	1/4W 680
R903, 904	ERDS2TJ104	1/4W 100K
R905, 906	ERDS2TJ103	1/4W 10K
R907-911	ERDS2TJ104	1/4W 100K
R920	ERDS2TJ271	1/4W 270
R921	ERDS2EJ121	1/4W 120
R922	ERDS2TJ472	1/4W 4.7K
R923	ERDS2TJ102	1/4W 1K
R926	ERDS2TJ122	1/4W 1.2K
R927	ERDS2TJ181T	1/4W 180

Ref. No.	Part No.	Values & Remarks
R928	ERDS2TJ222	1/4W 2.2K
R929	ERDS2TJ562	1/4W 5.6K
R930, 931	ERDS2TJ101	1/4W 100
R932-934	ERDS2TJ102	1/4W 1K
R935	ERDS2TJ473	1/4W 47K
R936-944	ERDS2TJ102	1/4W 1K
R946-949	ERDS2TJ103	1/4W 10K
R950	ERDS2TJ102	1/4W 1K
R951	ERDS2TJ122	1/4W 1.2K
R952	ERDS2TJ152	1/4W 1.5K
R953	ERDS2TJ182	1/4W 1.8K
R954	ERDS2TJ222	1/4W 2.2K
R955	ERDS2TJ332	1/4W 3.3K
R956	ERDS2TJ472	1/4W 4.7K
R957	ERDS2TJ682T	1/4W 6.8K
R960	ERDS2TJ102	1/4W 1K
R961	ERDS2TJ122	1/4W 1.2K
R962	ERDS2TJ152	1/4W 1.5K
R963	ERDS2TJ182	1/4W 1.8K
R964	ERDS2TJ222	1/4W 2.2K
R965	ERDS2TJ332	1/4W 3.3K
R966	ERDS2TJ472	1/4W 4.7K
R967	ERDS2TJ682T	1/4W 6.8K
R970	ERDS2TJ102	1/4W 1K
R971	ERDS2TJ122	1/4W 1.2K
R972	ERDS2TJ152	1/4W 1.5K
R973	ERDS2TJ182	1/4W 1.8K
R974	ERDS2TJ222	1/4W 2.2K
R975	ERDS2TJ332	1/4W 3.3K
R976	ERDS2TJ472	1/4W 4.7K
R977	ERDS2TJ682T	1/4W 6.8K
R978	ERDS2TJ123	1/4W 12K
R980	ERDS2TJ102	1/4W 1K
R981	ERDS2TJ122	1/4W 1.2K
R982	ERDS2TJ152	1/4W 1.5K
R983	ERDS2TJ182	1/4W 1.8K
R984	ERDS2TJ222	1/4W 2.2K
R985	ERDS2TJ332	1/4W 3.3K
R986	ERDS2TJ472	1/4W 4.7K
R987	ERDS2TJ682T	1/4W 6.8K
R991	ERDS2TJ103	1/4W 10K
R1004, 1005	ERDS2TJ472	1/4W 4.7K
R1008, 1009	ERDS2TJ224T	1/4W 220K
R1010	ERDS2TJ471	1/4W 470
R1011-1013	ERDS2TJ473	1/4W 47K
R1014, 1015	ERDS2TJ223	1/4W 22K
R1016	ERDS2TJ752T	1/4W 7.5K
R1017	ERDS2TJ153	1/4W 15K
R1018	ERDS2TJ202T	1/4W 2K
R1019, 1020	ERDS2TJ473	1/4W 47K
R1021	ERDS2TJ153	1/4W 15K
R1022	ERDS2TJ752T	1/4W 7.5K

Ref. No.	Part No.	Values & Remarks
R1023	ERDS2TJ202T	1/4W 2K
R1025, 1026	ERDS2TJ102	1/4W 1K
R1405-1410	ERDS2TJ153	1/4W 15K
R1411	ERDS2TJ272T	1/4W 2.7K
R1431	ERDS2TJ105T	1/4W 1M
R1434	ERDS2TJ822	1/4W 8.2K
R1435	ERDS2TJ103	1/4W 10K
R1449	ERDS2TJ102	1/4W 1K
R1450, 1451	ERDS2TJ274	1/4W 270K
R1452	ERDS2TJ561	1/4W 560
R1453	ERDS2TJ473	1/4W 47K
R1454	ERDS2TJ472	1/4W 4.7K
R1455	ERDS2TJ153	1/4W 15K
R1456	ERDS2TJ273	1/4W 27K
R1457	ERDS2TJ103	1/4W 10K
R1458	ERDS2TJ332	1/4W 3.3K
R1459	ERDS2TJ123	1/4W 12K
R1460	ERDS2TJ181T	1/4W 180
R1462	ERDS2TJ822	1/4W 8.2K
R1463	ERDS2TJ473	1/4W 47K
R1464-1466	ERDS2TJ474	1/4W 470K
R1467-1469	ERDS2TJ332	1/4W 3.3K
R1472	ERDS2TJ682T	1/4W 6.8K
R1473	ERDS2TJ222	1/4W 2.2K
R1474-1476	ERDS2TJ474	1/4W 470K
R1477	ERDS2TJ222	1/4W 2.2K
R1478	ERDS2TJ682T	1/4W 6.8K
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U
C103	ECBT1C103NS5	16V 0.01U
C104	ECBT1H102KB5	50V 1000P
C105	ECBT1H470JC5	50V 47P
C106	ECBT1C103NS5	16V 0.01U
C107	ECBT1H473ZF5	50V 0.047U
C108	ECBT1H100JC5	50V 10P E, EB, G, GN
C108	ECBT1H8R2KC5	50V 8.2P EG
C109, 110	ECBT1C103NS5	16V 0.01U
C111	ECEA1EKA4R7B	25V 4.7U
C112	ECBT1C103NS5	16V 0.01U
C113	ECBT1H102KB5	50V 1000P
C114	ECEA1HKA3R3B	50V 3.3U
C115	ECEA1CKA100B	16V 10U
C116	ECBT1C822MS5	16V 8200P
C117	ECQP2A471JZT	100V 470P
C118, 119	ECQB1H103JF3	50V 0.01U
C120, 121	ECEA1HKA010B	50V 1U
C122	ECEA1HKA2R2B	50V 2.2U
C123	ECEA1HKA010B	50V 1U
C124	ECBT1H102KB5	50V 1000P
C125	ECBT1H150JC5	50V 15P

Ref. No.	Part No.	Values & Remarks
C126	ECBT1H473ZF5	50V 0.047U
C127	ECEA1CKA220B	16V 22U
C128	ECBT1C103NS5	16V 0.01U
C129, 130	ECEA0JKA101B	6.3V 100U
C131	ECBT1C103NS5	16V 0.01U
C132	ECBT1H102KB5	50V 1000P
C133	ECBT1H150JC5	50V 15P
C134	ECBT1H180JC5	50V 18P
C135, 136	ECBT1C103KS5	16V 0.01U
C137, 138	ECBT1H561KB5	50V 560P
C139, 140	ECQB1H682JF3	50V 6800P
C141-144	ECEA1HKA010B	50V 1U
C145	ECBT1H220JC5	50V 22P
C146	ECBT1H331KB5	50V 330P
C147	ECBT1H102KB5	50V 1000P
C148	ECBT1C103NS5	16V 0.01U
C149	ECBT1H104ZF5	50V 0.1U
C171	ECBT1C103NS5	16V 0.01U
C172	ECBT1H331KB5	50V 330P
C173	ECEA1CKA220B	16V 22U
C174	ECEA1CKA101B	16V 100U
C181	ECBT1H471KB5	50V 470P
C351, 352	ECEA0JKA101B	6.3V 100U
C353	ECEA0JKA470B	6.3V 47U
C401	ECEA1VKA4R7B	35V 4.7U
C402, 403	ECBT1E103ZF	25V 0.01U
C404	ECEA1VKA4R7B	35V 4.7U
C405, 406	ECBT1H101KB5	50V 100P
C409, 410	ECEA1CKA220B	16V 22U
C411, 412	ECBT1H101KB5	50V 100P
C413, 414	ECEA1CKA100B	16V 10U
C415, 416	ECBT1E103ZF	25V 0.01U
C417, 418	ECBT1H101KB5	50V 100P
C419-422	ECBT1H331KB5	50V 330P
C423-426	ECBT1H101KB5	50V 100P
C427, 428	ECBT1H221KB5	50V 220P
C431, 432	ECEA1CKA100B	16V 10U
C440	ECBT1E103ZF	25V 0.01U
C451, 452	ECEA1VKA4R7B	35V 4.7U
C453, 454	ECBT1H100JC5	50V 10P
C455, 456	ECBT1H102KB5	50V 1000P
C457, 458	ECEA1AKA330B	10V 33U
C459, 460	ECFR1E223KR	25V 0.022U
C461, 462	ECFR1E682KR	25V 6800P
C463, 464	ECEA1VKA4R7B	35V 4.7U
C465, 466	ECBT1E103ZF	25V 0.01U
C469, 470	ECBT1H181KB5	50V 180P
C471, 472	ECEA1HKA3R3B	50V 3.3U
C475, 476	ECBT1H150J5	50V 15P
C477, 478	ECBT1H221KB5	50V 220P
C479, 480	ECBT1H560J5	50V 56P
C481-484	ECEA1VKA4R7B	35V 4.7U

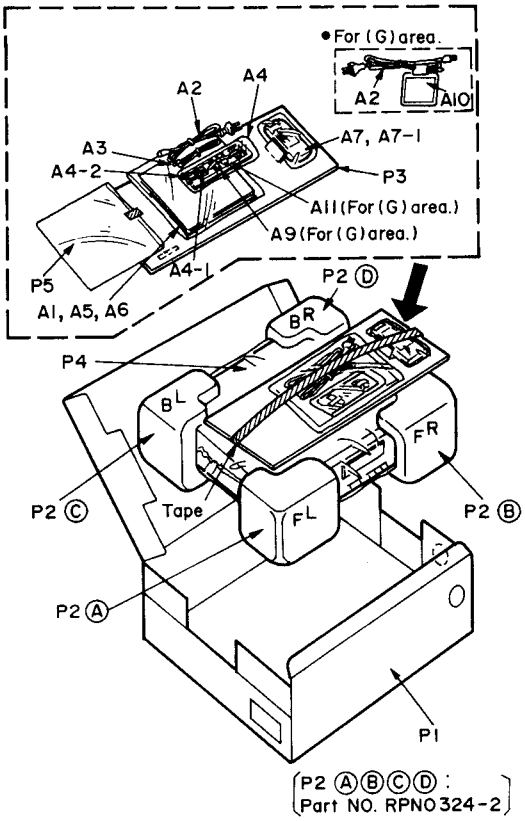
Ref. No.	Part No.	Values & Remarks
C485, 486	ECFR1E123KR	25V 0.012U
C487, 488	ECQV1H683JM3	50V 0.068U
C489, 490	ECFR1E562KR	25V 5600P
C491, 492	ECFR1E273KR	25V 0.027U
C495, 496	ECBT1E103ZF	25V 0.01U
C503, 504	ECEA1CKA220B	16V 22U
C518	ECBT1H104ZF5	50V 0.1U
C519	ECBT1E103ZF	25V 0.01U
C541, 542	ECA1JM330B	63V 33U
C543, 544	ECBT1H332KR5	50V 3300P
C551, 552	ECEA1HKA3R3B	50V 3.3U
C553, 554	ECBT1E103ZF	25V 0.01U
C555, 556	ECBT1H101KB5	50V 100P
C557	ECBT1H331KB5	50V 330P
C558	ECBT1H221KB5	50V 220P
C559, 560	ECEA1HKA3R3B	50V 3.3U
C561, 562	ECEA1CKA100B	16V 10U
C571, 572	ECBT1E103ZF	25V 0.01U
C573	ECEA1HKA3R3B	50V 3.3U
C591, 592	ECEA0JKA101B	6.3V 100U
C593, 594	ECFR1E104KR	25V 0.1U
C595	ECBT1E103ZF	25V 0.01U
C601, 602	ECEA1EKN3R3B	25V 3.3U
C603, 604	ECBT1H331KB5	50V 330P
C605, 606	ECEA1CKN220B	16V 22U
C607, 608	ECCD1H150KC	50V 15U
C609, 610	ECBT1H221KB5	50V 220P
C611, 612	ECQV1H473JM3	50V 0.047U
C613	ECA1HM470B	50V 47U
C614	ECQV1H474JM3	50V 0.47U
C615	ECEA2AU100	100V 10U
C616	ECEA2AN2R2SB	100V 2.2U
C621-624	ECKT1H223ZF	50V 0.022U
C625-627	ECKR1H103ZF5	50V 0.01U
C631, 632	ECEA1VKA4R7B	35V 4.7U
C633, 634	ECBA1H681KB5	50V 680P
C635, 636	ECEA1CKA220B	16V 22U
C637, 638	ECCR1H100K5	50V 10P
C639, 640	ECBT1H821KB5	50V 820P
C641, 642	ECQV1H473JM3	50V 0.047U
C644	ECA1JM330B	63V 33U
C645	ECEA2AU100	100V 10U
C651	ECEA1HKA2R2B	50V 2.2U
C652	ECEA1CKA100B	16V 10U
C653	ECBT1E223ZF	25V 0.022U
C655	ECEA0JKA221B	6.3V 220U
C701	ECBT1E103ZF	25V 0.01U
C702	ECQE2104KF3	250V 0.1U
C703, 704	ECES66V802UZ	66V 8000U ⚠
C707	ECA1VM101B	35V 100U
C708	ECKR1H103ZF5	50V 0.01U
C709	ECEA1CKA330B	16V 33U

Ref. No.	Part No.	Values & Remarks
C710	ECBT1E103ZF	25V 0.01U
C711	ECKR1H103ZF5	50V 0.01U
C712	ECA1HM470B	50V 47U
C713	ECKR1H103ZF5	50V 0.01U
C715	ECEA1CKA470B	16V 47U
C716	ECEA2AU100	100V 10U
C722	ECQE2104KF3	250V 0.1U
C751	ECKWNS103ZVS	500V 0.01U ⚠
C752	ECKR1H103ZF5	50V 0.01U
C753	ECA1EM102B	25V 1000U ⚠
C754	ECBT1E103ZF	25V 0.01U
C756	ECBT1E103ZF	25V 0.01U
C757	ECEA1CKA470B	16V 47U
C758	ECEA1AKA101B	10V 100U
C771, 772	ECA1VM331B	35V 330U ⚠
C795, 796	ECA1HM470B	50V 47U
C891	ECFR1E392KR	25V 3900P
C901	ECA0JM102B	6.3V 1000U
C902, 903	ECBT1E103ZF	25V 0.01U
C904	ECA0JM471B	6.3V 470U
C906	ECEA0JKA101B	6.3V 100U
C907	ECEA0JKA220B	6.3V 22U
C908	ECBT1E103ZF	25V 0.01U
C911, 912	ECEA2AU100	100V 10U
C913, 914	ECEA1VKA100B	35V 10U
C916	ECEA1HKA010B	50V 1U
C920	ECEA1HKA010B	50V 1U
C921-928	ECBT1H331KB5	50V 330P
C929	ECBT1H101KB5	50V 100P
C932	ECBT1E103ZF	25V 0.01U
C933, 934	ECBT1H101KB5	50V 100P
C1001	ECBT1E103ZF	25V 0.01U
C1002	ECEA1CKA100B	16V 10U
C1003-1005	ECEA1HKA010B	50V 1U
C1006	ECEA1HKA3R3B	50V 3.3U
C1007	ECFR1E153KR	25V 0.015U
C1008	ECFR1E103KR	25V 0.01U
C1009	ECBA1H681KB5	50V 680P
C1010	ECQV1H104JM3	50V 0.1U
C1012, 1013	ECQV1H104JM3	50V 0.1U
C1014	ECEA1HKAR33B	50V 0.33U
C1015	ECBA1H681KB5	50V 680P
C1016, 1017	ECEA1VKA4R7B	35V 4.7U
C1018	ECEA1HKAR15B	50V 0.15U
C1019	ECEA1HKA3R3B	50V 3.3U
C1020	ECQV1H154JM3	50V 0.15U
C1021, 1022	ECEA1CKA470B	16V 47U
C1023, 1024	ECEA1HKA3R3B	50V 3.3U
C1025	ECEA1HKAR33B	50V 0.33U
C1026, 1027	ECQV1H104JM3	50V 0.1U
C1028	ECBA1H681KB5	50V 680P
C1029, 1030	ECEA1VKA4R7B	35V 4.7U

Ref. No.	Part No.	Values & Remarks
C1031	ECEA1HKAR15B	50V 0.15U
C1032	ECEA1HKA3R3B	50V 3.3U
C1033	ECQV1H154JM3	50V 0.15U
C1035	ECQV1H474JM3	50V 0.47U
C1036	ECBT1E103ZF	25V 0.01U
C1037, 1038	ECEA1CKA101B	16V 100U
C1403	ECEA1HKA010B	50V 1U
C1404	ECFR1E332KR	25V 3300P
C1405	ECBT1H561KB5	50V 560P
C1406	ECQV1H104JM3	50V 0.1U
C1407	ECEA1CKA470B	16V 47U
C1408, 1409	ECQV1H474JM3	50V 0.47U
C1410	ECQV1H104JM3	50V 0.1U
C1411	ECFR1E332KR	25V 3300P
C1412	ECBT1H561KB5	50V 560P
C1414	ECFR1E123KR	25V 0.012U
C1415	ECBT1H104ZF5	50V 0.1U
C1416	ECEA0JKA221B	6.3V 220U
C1451	ECBT1H101KB5	50V 100P
C1457, 1458	ECEA1CKA100B	16V 10U
C1459	ECEA1CKA101B	16V 100U
C1460	ECFR1E822KR	25V 8200P
C1461	ECEA1CKA220B	16V 22U
C1462	ECFR1E273KR	25V 0.027U
C1463	ECFR1E472KR	25V 4700P
C1464	ECEA1CKA100B	16V 10U
C1465	ECBT1E103ZF	25V 0.01U
C1466	ECEA1HKA0R1B	50V 0.1U
C1468	ECEA1HKAR33B	50V 0.33U
C1469	ECFR1E333KR	25V 0.033U
C1470	ECEA1HKA3R3B	50V 3.3U
C1472, 1473	ECEA1HKA3R3B	50V 3.3U
C1474, 1475	ECBT1E103ZF	25V 0.01U
C1476-1478	ECBT1H181KB5	50V 180P
C1479, 1480	ECEA1CKA470B	16V 47U
C1481-1483	ECEA1HKA3R3B	50V 3.3U
C1489, 1490	ECEA1HKA3R3B	50V 3.3U
C1493	ECQV1H563JM3	50V 0.056U
C1494	ECEA1CKA100B	16V 10U

■ PACKAGING

• For (E, EG, G) areas.



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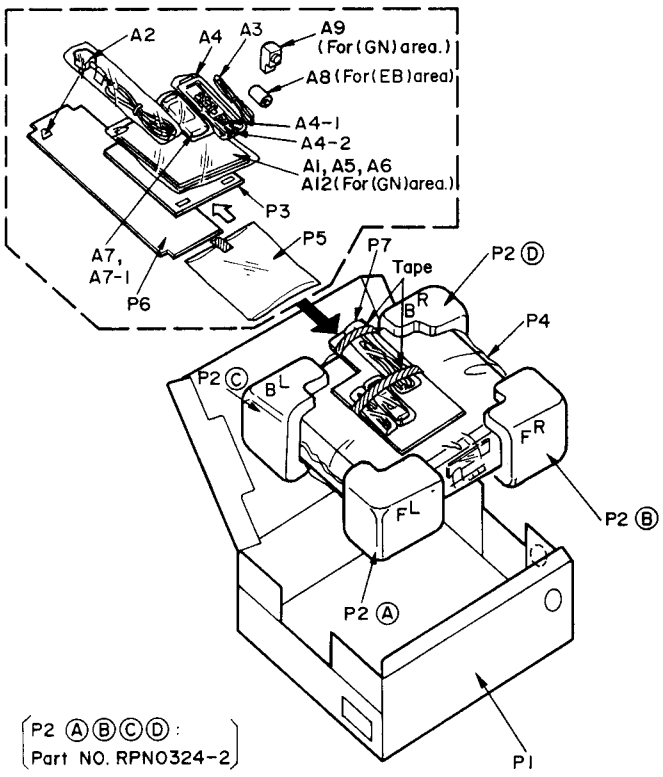
• For (EB, GN) areas.



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